

MINUTES OF THE 13th EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 23-25October, 2019

Venue: Teesta Conference Hall, First Floor, Vayu Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3

Time: 10:30 AM

13.1 Opening Remarks by the Chairman

13.2 Confirmation of the Minutes of the 11th meeting held during 28-29 August, 2019 and 12th Meeting of the EAC (Industry-2) held during 26-27 September, 2019 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments, except as referred below, were offered on the minutes of its 11th meeting held during 28-29 August, 2019 and 12th meeting held during 26-27 September, 2019 at New Delhi, confirmed the same.

13.2.1 Corrections/amendment in the Minutes of the earlier meeting(s)

Agenda 13.2.2

Modernization cum expansion of fertilizer manufacturing unit at SPIC Nagar, Muthiahpuram, Taluka & District Tuticorin (Tamil Nadu) by M/s Southern Petrochemical Industries Corporation Limited - For Environmental Clearance.

[IA/TN/IND2/106298/2019, J-11011/171/2007-IA-II(I)]

13.2.2.1 The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 26-27 September, 2019 in the Ministry, and has recommended the project for grant of environmental clearance.

13.2.2.2 The project proponent vide letter dated 8th October, 2019 has requested for correction in the minutes of the EAC meeting, with the details as under:

S. No	Condition/ Line/Paragraph	Details mentioned as per EAC minutes/ condition	Corrigendum required in EAC minutes/ condition	Clarification / Justification
1	12.3.15.1 EAC Minutes - Page 54 para 6	Power requirement for the existing and proposed modernization will be 17000KVA and will be met from Tamilnadu Generation and Distribution Corporation and 18.4 MW Captive power plant. It is proposed to install 25 MW HRSG unit.	Power requirement for the existing and proposed modernization will be 17000KVA and will be met from Tamilnadu Generation and Distribution Corporation and 18.4 MW Captive power plant. It is proposed to install 25 MW GT/HRSG unit for process air compressor.	Gas turbine (GT) /Heat recovery steam generator (HRSG) is installed for process air compressor.

2	12.3.15.1 EAC Minutes - Page 55 para 3	Consent to operate for the present industrial operations issued by the Gujarat PCB vide letter dated 25th June, 2019 is valid up to 31 st March, 2020.	Consent to operate for the present industrial operations issued by the Tamil Nadu PCB vide letter dated 25th June, 2019 is valid up to 31 st March, 2020.	CTO for the present operations is issued by Tamilnadu PCB.
3	12.3.15.3 EAC Minutes - Page 55 para 4	The EAC, after detailed presentation.....; the increase in the production will be by virtue of the change in the change in raw material only.....	The EAC, after detailed presentation.....;the increase in the production will be by virtue of the change in raw material only...	Request to delete the repeated word
4	12.3.15.3 EAC Minutes – terms and condition Page no.55. point no.5	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled at 99.5% with effective chillers:	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines. Fugitive emissions shall be controlled by providing closed handling and conveying system.	In our process fugitive emission is controlled by providing closed handling and conveying system
5	12.3.15.3 EAC Minutes – terms and condition. Page no.56 .Point no.11	Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.	The condition shall be deleted	Natural gas is used as fuel for Boiler and hence fly ash generation will not be there.
6	12.3.15.3 EAC Minutes – terms and condition. Page no.56 .Point no.12	The company shall undertake waste minimization measures as below: i) Metering and control of quantities of active ingredients to minimize waste. ii) Reuse of by products from the process as raw materials or as raw material substitutes in	The company shall undertake waste minimization measures as below 1. More efficient use of raw materials, water and energy. 2. Through an effective water management programme to reduce water consumption. 3. Use of automated	Waste minimization measures as applicable for our process is mentioned.

		other processes. iii) Use of automated filling to minimize spillage. iv) Use of Close Feed system into batch system. v) Venting equipment through vapour recovery system. vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.	filling in bagging section to minimize spillages. 4. Use of closed system for storage, handling and conveying of raw materials /chemicals.	
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13.2.2.3 The Committee, after detailed deliberations, noted that the request of the project proponent is on merit and as presented before the EAC, and has accordingly agreed for correction in the minutes of meeting held on 26-27 September, 2019 as submitted above, with all other terms and conditions remain unchanged.

Agenda 13.2.3

Indian Oil Technology Development And Deployment Centre at IMT, HSIIDC, Sector-67, Faridabad (Haryana) by M/s Research and development centre Indian Oil Corporation Faridabad - For Environmental Clearance

[IA/HR/IND2/71701/2017, IA-J-11011/578/2017-IA-II(I)]

13.2.3.1 The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 26-27 September, 2019 in the Ministry, and has recommended the project for grant of environmental clearance.

13.2.3.2 The project proponent vide letter dated 16th October, 2019 has requested for correction in the minutes of the EAC meeting, with the details as under:

S. No	Condition/ Line/Paragraph	Details mentioned as per EAC minutes/ condition	Corrigendum required in EAC minutes/ condition	Clarification/ Justification
1	12.3.18.5 EAC Minutes – condition Page 54 para 6	Fund provision of Rs. 22 Crs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Fund provision of Rs. 18.97 Crores shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	The CER fund calculated in line with Ministry OM dated 1 st May, 2018 and according to said OM the CER fund will be 18.97 crore

13.2.2.3 The Committee, after detailed deliberations, noted that the request of the project proponent is on merit and as presented before the EAC, and has accordingly agreed for correction in the minutes of meeting held on 26-27 September, 2019 as submitted above, with all other terms and conditions remain unchanged.

Day One: 23rd October, 2019

13.3 Environmental Clearance

Agenda No.13.3.1

Proposed expansion of molasses/grain based Distillery from 60 KLPD to 120 KLPD & Co-generation from 1.2MW to 6.2 MW of M/s Shamnur Sugars Limited, located at Village Duggavathi, Tehasil: Harapanahalli, District: Davanagere, State: Karnataka- Environmental Clearance

[IA/KA/IND2/109591/2008, IA-J-11011/91/2008-IA-II(I)]

13.3.1.1 The proposal is for environmental clearance for the proposed expansion of molasses/grain based Distillery from 60 KLPD to 120 KLPD & Co-generation from 1.2MW to 6.2 MW of M/s Shamnur Sugars Limited, located at Village Duggavathi, Tehasil: Harapanahalli, District: Davanagere, State: Karnataka. The project activity covered under item 5(g) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

Sl	Item	Details
1	Name of the Project/Activity	Proposed expansion of molasses/grain based Distillery from 60 KLPD to 120 KLPD & Co-generation from 1.2MW to 6.2 MW
2	Name of the Company / Organisation	M/s Shamnur Sugars Limited.
3	Item as per the schedule to EIA Notification, 2006	5(g)-Distilleries
4	Category (A/B)	A
5	Project Type (New/Expansion)	Expansion
6	Location	
	Village Name	Duggavathi
	Tehsil Name	Harapanahalli
	District Name	Davanagere
	State Name	Karnataka State
	Plot/Survey/Khasra No.	Survey No:234/235/112/113/114
	Bounded Latitudes (North)	From 14.625192 To 14.631744
	Bounded Longitudes (East)	From 75.837911 To 75.846811
	Survey of India Topo Sheet No	D43514
7	Details of Terms of Reference (ToR)	The MoEF&CC vide letter F No. J 11011/91/2008-IA.II(I) dated 30th November 2018 has issued the Standard Terms of Reference
8	Details of Public Hearing	The expansion proposal is intended for EBP and exemption of PH was claimed under the notification dated SO 345(E) dated 17.01.2019.
9	Details of the Earlier EC	Prior Environmental Clearance from MoEF&CC was obtained for establishment of 60 KLPD Molasses/Grain based distillery to manufacture RS/ENA/Ethanol of fuel grade based and 1.2 MW

						captive Co-Generation power plant vide letter J-11011/91/2008 – IA II (I) dated 9 th April, 2009.				
10	Details of Certificate of Compliance					Obtained vide EP/12.1/605/Karnataka dated 31.01.2019 from Regional office, Bangalore				
11	Product Details									
	No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other mode of transport	
	1	Ethanol production	60	60	120	KLD		Road		
12	Details of Configuration									
Sl	Plant / Equipment / Facility		Existing Configuration	Proposed Configuration	Final configuration after expansion		Remarks			
1	Fementers		-	3 Nos	3Nos					
2	Distillation system		60 KLD	60 KLD	120KLD					
3	Boiler		16TPH	46TPH	62TPH					
4	G set		1.2MW	5.0MW	6.2MW					
5	Storage -Molasses		1 Tank	1 Tank	2 Tanks		11999100 Litres			
13	Details of Consent to Operate					Obtained vide PCB/10278 dated 28 Oct 2016 and valid upto 30 Jun 2021				
14	Project Cost									
	Total Cost of the Project (in Crores)					101				
	Funds allocated for EMP-Capital (in Crores)					2.2				
	Funds allocated towards CER (in Crores)					1.0				
	Funds allocated for EMP-Recurring per Annum (in Crores)					2.06				
15	Whether project attracts the General Condition specified in the Schedule of EIA Notification, 2006?					No				
16	Whether project attract the Specific Condition specified in the Schedule of EIA Notification, 2006?					No				
17	Raw Material / Fuel Profile									
No.	Raw Material / Fuel	Quantity (TPA)	Source	Mode of Transport	Distance of Source from Project Site (in Km)		Type of Linkage			
(1.)	Grains	57600	locally available	Road	25		Open Market			
(2.)	Molasses as raw material	138000	from	Road	25		from sugar unit of our industry			

	for distillery							
18	Baseline Data							
	Period of Base Line Data Collection				From 03 Dec 2018 To 28 Feb 2019			
	Season				Winter			
19	Details of AAQ Monitoring							
	No. of ambient Air Quality (AAQ) monitoring locations				8			
		SI	Criteria Pollutants	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard	
				Micro Gram per Meter Cube				
		1	NOx	14.8	7.1	13.7	80	
		2	PM2.5	57.6	17.2	33.4	60	
		3	PM10	65.8	30.6	60.8	100	
		4	SO2	25.4	4.8	12.4	80	
20	Details of Ground Water monitoring							
	No. of Ground Water monitoring locations							
		SI	Criteria Pollutants	Unit	Maximum Value	Minimum Value	Desirable Limit	Max. permissible Limit
		1	Total Hardness	mg/L	1000	320	200	600
		2	Chlorides	mg/L	660	57	250	1000
		3	pH	NA	8	7.1	6.5	8.5
		4	TDS	mg/L	1919	255	500	2000
		5	Heavy Metals	mg/L	1.16	0.016	0.3	0.3
		6	Fluoride	mg/L	0	0	1	1.5
		7	TSS	mg/L	0	0	0	0
21	Details of Surface Water monitoring							
	No. of Surface Water monitoring locations				8			
		SI	Criteria Pollutants	Unit	Maximum Value	Minimum Value	Classification of inland water body	
		1	BOD	mg/L	12.0	9.5	D	
		2	COD	mg/L	57	41	D	
		3	TSS	mg/L	15.6	13.6	D	
		4	DO	mg/L	4.8	4.2	D	
		5	pH	NA	7.8	7.38	D	
22	Details of Ground Water Table							

	Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl))				From 1.2 To 14.84		
	Range of Water Table Post-Monsoon Season (meters below ground level (m bgl))				From 0.024 To 1.41		
	Whether Ground Water Intersection will be there?				No		
23	Details of Water Requirement (During Operation)						
	Source	Required Quantity	Distance from Source	Mode of Transport	Method of withdrawal	Permission details	Permitted quantity
	Surface	686	3.5	Pipeline	pumping	Government Order No.CI 16 SPI 97 dated 15.02.1997 dated 5 Feb 1997	686
24	Waste Water Management(During Operation)						
	Source	Quantity of Waste Water Generated in KLD	Treatment Capacity in KLD	Treatment Method	Mode of disposal	Quantity of Treated Water Used in Recycling/Reuse in KLD	Quantity of Discharged Water in KLD
	Domestic	8	10	septic & soak pit	percolation to ground	0	8
	Industrial-spent wash	1186	1200	Incineration	Incineration	974	212
	Condensate & utilities	1200	1200	ETP/CPU	Reuse within the Plant & Recycling	1200	
	Total Waste Water Generation				2394 KLD		
	Total Discharged Water				220 KLD		
	Total Reused Water				2174 KLD		
25	Solid Waste Generation/Management						
	Sl	Name of the Waste	Type of Waste	Quantity (TPA)	Distance for disposal site in Km	Mode of Transport	Mode of disposal
	1	Boiler ash	Industrial Waste	9900	10	Road	given to farmers or bio compost manufacturer
	2	ETP sludge	Industrial Waste	1980	10	Road	given to farmers
	3	Yeast sludge	Industrial Waste	3600	25	Road	given to farmers for use as bio manure
	4	DDGS	Industrial Waste	10080	10	Road	dried and disposed as

							cattle feed	
26	Air Quality Impact Prediction							
	SI	Criteria Pollutants	Baseline Concentration (Micro Gram per Meter Cube)	Distance of GLC in Km	Incremental Concentration (Micro Gram per Meter Cube)	Total GLC	Prescribed Standard	
	1	NOx	14.8	10	0.568	15.4	80	
	2	SO ₂	25.4	10	6.92	32.4	80	
	3	PM ₁₀	65.8	10	1.44	67.3	100	
	4	PM _{2.5}	57.6	10	0.829	58.5	60	
27	Stack details							
	SI	Source	Fuel	Stack height in m	Stack diameter in m	Pollutants	Emissions	
	1	46 TPH	Concentrated spent wash & coal	73	2	PM,SOx & NOx	150,100,50	
	2	500 KVA DG set	HSD	7	0.5	PM,SO2 & NOx	150	
	3	500 KVA DG set	HSD	7	0.5	PM,SO2 & NOx	150	
	4	16TPH Boiler	concentrated spent wash & bagasse	46	1.85	PM,SO2 & NOx	150,100,50	
	5	500 KVA DG set	HSD	7	0.5	PM,SO2 & NOx	150	
	6	500 KVA DG set	HSD	7	0.5	PM,SO2 & NOx	150	
	7	500 KVA DG set	HSD	7	0.5	PM,SO2 & NOx	150	
28	Power Requirement							
	Quantity (kVA))				6200			
	Source				captive power plant			
	Standby Arrangement (Details of DG Sets)				2X500 KVA			
	Stack Height (in m)				7 m			
29	Total land requirement for the project				18.66			
30	% of area allocated for greenbelt				33%			
	Description		Existing greenbelt	Proposed greenbelt		Total greenbelt in ha		
	Total Area of Green Bel		6.53 Ha	0 Ha		6.53 Ha		
	Percentage of Total Project Area		34.98%	0		34.98%		
	No. of Plants		10100	0		10100		
	Funds Allocated		2.34	1.2		3.54		
31	Ecological and environmental senility within 10 Km							
	Critically Polluted Areas identified by CPCB				Nil			
	Wildlife Sanctuaries				Nil			
	Wildlife Corridors				Nil			

	Notified protected Areas	Nil
	Eco-sensitive Areas	Nil
	Eco-sensitive Zones	Nil
	Archaeological Sites	Nil
	Defence Installations	Nil
	Forests	Nil
32	Whether any Forest Land involved in the proposal?	No
33	Whether R&R involved in the proposal?	No
34	Total manpower requirement	120
35	Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up?	No
36	Whether any Direction issued under EPA Act/Air Act/Water Act?	No
37	Details of EIA Consultant	M/s Samrakshan, Swastik Manadi Arcade, F-4, 1st floor, S.C. road, Sheshadripuram, Bangalore, Opearing with court order vide WPNo.-12624-25/2017(GM-RES)

13.3.1.2 The project proponent also submitted following information as a part of reply to EDS:

- The present production is molasses based. Facility for grain based is also in placed.
- Molasses is procured from the sugar unit of proponent located adjacent to the distillery as well as procured from nearby sugar factories.
- Whenever grain based production is planned, grain is procured from local farmers around 25 kms from the plant.
- The total land area of the distillery is 45.36 Acres out of 380 Acres in possession of M/s Shamnur Sugars Ltd. The expansion project is planned within the existing distillery land of 45.36 Acres. There is no proposal to procure additional land.
- Government of Karnataka has permitted to draw 10,00,000 litres/day water from Tunga Bhadra river and as per the permission order and have entered into agreement with Karnataka Neeravari Nigama Limited, No.5, Bhadra Canal Division, Davanagere. The agreement was valid up to 21.09.2015. The application for continuation is made to the Government on 26.10.2015 for 5 years and is recommended by the Committee constituted by the Water Resources Department for allotment of water for industrial use vide committee meeting dated 30.10.2018 with Vide No. 214 KBN 2018 dated: 27/11/2018. The copy of translated proceedings were submitted. The extension is awaited.
- The PP applied for financial assistance from DoF & PD and received approval vide letter no: F.No. 1/131/2018 (BP&E) for expansion of capacity from 60 KLPD to 120 KLPD and Letter no: F.No. 2/131/2018 (BP&E) for installation of incineration boiler.

13.3.1.3 The EAC, noted the following:

- The EIA/EMP report has been prepared and submitted by consultant/organization M/s Samrakshan, not accredited with the QCI/NABET, which is not in accordance with the ToR and provisions of the EIA Notification, 2006, as amended.
- The Committee further noted that Mr Nandakumar and Mr Hanumanth Raj having stay order from the Hon'ble High Court of Karnataka at Bengaluru are eligible for preparation of EIA/EMP report in their respective field. However, EIA/EMP report need to be prepared in a holistic way, requiring assistance and examination of

various experts, the Committee, accordingly, desired that the EIA/EMP may be prepared/presented by the accredited consultants.

13.3.1.4 After detailed deliberation, the proposal was therefore returned in the present form.

Agenda No.13.3.2

Manufacture of pesticide specific intermediate at Plot No: N-67, MIDC Additional Ambarnath, Taluka Ambarnath, District Thane (Maharashtra) by M/s Altra Pure Chem - Environmental Clearance

[IA/MH/IND2/109064/2019, IA-J-11011/214/2019-IA-II(I)]

13.3.2.1 The proposal is for environmental clearance for the manufacture of pesticide specific intermediate at Plot No: N-67, MIDC Additional Ambarnath, Taluka Ambarnath, District Thane (Maharashtra) by M/s Altra Pure Chem. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

Sl	Item	Details	
1	Name of the Project/Activity	Proposed pesticide specific intermediate manufacturing unit of M/s Altra Pure Chem Plot No: N-67, MIDC Additional Ambernath, Taluka: Ambernath, Thane District, Maharashtra	
2	Name of the Company / Organisation	M/s ALTRA PURE CHEM.	
3	Item as per the schedule to EIA Notification, 2006	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)	
4	Category (A/B)	A	
5	Project Type (New/Expansion)	New project	
6	Location		
	Village Name	Additional MIDC, Ambernath	
	Tehsil Name	Ambarnath	
	District Name	Thane	
	State Name	Maharashtra	
	Plot/Survey/Khasra No.	N-67	
	Bounded Latitudes (North)	FROM 92 To 92	
	Bounded Longitudes (East)	FROM 73 To 73	
	Survey of India Topo Sheet No	E43B4	
7	Details of Terms of Reference (ToR)	The MoEF&CC vide letter IA-J-11011/214/2019-IA-II(I) dated 2 nd August, 2019 has issued the Standard Terms of Reference	
8	Details of Public Hearing	Exempted as the proposed project located in the notified industrial area.	
9	Details of the Earlier EC	Not applicable.	
10	Details of Certificate of Compliance	Not applicable	
11	Details of project configuration		
S. No.	Plant/Equipment/Facility	Configuration	Remarks

(1.)	GLR	5 KL	21 No.
(2.)	Water ring pump	--	5 No.
(3.)	Water jet pump	--	1 No.
(4.)	Pumps	RPP 120	4 No.
(5.)	HDPE Storage Tank	5.0 KL	4 No.
(6.)	GLR â€“ Day Tank	0.5 KL	14 No.
(7.)	SS 316 â€“ Day Tank	0.5 KL	8 No.
(8.)	GLR	3 KL	32 No.
(9.)	Condenser	20 Sq m	3 No.
(10.)	Condenser	30 Sq m	1 No.
(11.)	Diaphragm Pump (Air)	S40-32-10	5 No.
(12.)	Vertical Pump	WLW-100	2 No.
(13.)	Receivers	10000 L	1 No.
(14.)	Extraction Vessel	--	1 No.
(15.)	Chip Condenser	15 Sq m	3 No.
(16.)	Graphite Condenser	15 Sq m	1 No.
(17.)	Metering Tank	200/300/600/1000	17 No.
(18.)	Distillation column	700 mm dia./20 m	
(19.)	Storage Tank	50 /20 cu. m	2 No.
(20.)	Water spray absorber	--	2 No.
(21.)	Oil Separation Tank	--	2 No.
(22.)	Air Compressor	--	1 No.
(23.)	Falling Film Absorber	--	2 No.
(24.)	Cooling tower	600 TR	1 No.
(25.)	Chilling plant	25 TR	1 No.
(26.)	HDPE Storage Tank	2.0 KL	6 No.
(27.)	GLR â€“ Day Tank	2.0 KL	4 No.
(28.)	GLR â€“ Day Tank	1.0 KL	12 No.
(29.)	GLR	2 KL	15 No.
(30.)	Rotary Vane Condenser	30 Sq m	5 No.
(31.)	Auto vertical SS Centrifuge	--	3 No.
(32.)	Receivers	1000/500 L	3 No.

(33.)	Snake Type Glass Condenser	1.5 Sq m	4 No.			
(34.)	Water Tank	5000 L	1 No.			
(35.)	Glass Condenser	3 sq m				
(36.)	Double Cone Dryer	--				
12	Details of product					
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Dimethyl amine (By-product)	2.6	Others	MT/M	Others	Road, Air/ Sea route
(2.)	Magnesium chloride (By-product)	124.6	Others	MT/M	Others	Road, Air/Sea route
(3.)	Potassium dihydrogen borate (By-product)	1.8	Others	MT/M	Others	Road, Air/Sea route
(4.)	2 Methyl 3-Biphenyl Methanol	100	Others	MT/M	Others	Road, Sea/Air route
13	Details of Consent to Operate			Not applicable		
14	Project Cost					
	Total Cost of the Project (in Crores)			25.0		
	Funds allocated for EMP-Capital (in Crores)			6.7716		
	Funds allocated towards CER (in Crores)			0.5		
	Funds allocated for EMP-Recurring per Annum (in Crores)			27.08		
15	Whether project attracts the General Condition specified in the Schedule of EIA Notification, 2006?			No		
16	Whether project attract the Specific Condition specified in the Schedule of EIA Notification, 2006?			No		
17	Raw Material / Fuel Profile					
	Proposed raw material/fuel			14924 TPA		
No.	Raw Material / Fuel	Quantity (TPA)	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage
(1.)	Bromobenzene	1440	Local	Road	250	Open Market

(2.)	Toluene	4344	Local	Road	20	Open Market
(3.)	Potassium Borohydride	96	Local	Road	30	Open Market
(4.)	2,6 Dichloro Tolune	1500	Local	Road	30	Open Market
(5.)	Processed Natural Gas	350	Local	Pipe Conveyor	0	Open Market
(6.)	Tetrahydrofuran	4272	Local	Road	30	Open Market
(7.)	Di Methyl Formamide	564	Local	Road	30	Open Market
(8.)	Magnesium tablets	408	Local	Road	250	Open Market
(9.)	Hydrochloric Acid	1992	Local	Road	20	Open Market
(10.)	FUEL-FURNACE OIL	308	Local	Road	50	Open Market

18	Baseline Data							
	Period of Base Line Data Collection				From 01 Mar 2018 To 31 May 2018			
	Season				Summer			
19	Details of AAQ Monitoring							
	No. of ambient Air Quality (AAQ) monitoring locations				8			

		Sl	Criteria Pollutants	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
				Micro Gram per Meter Cube			
		1	NOx	87	63	86.5	100
		2	PM2.5	42.1	14.0	41.7	80
		3	PM10	34.6	12.0	33.6	80
		4	SO2	46.2	28.8	45.0	60

20	Details of Ground Water monitoring								
	No. of Ground Water monitoring locations								

	S. No.	Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
	(1.)	TSS		mg/l		61	12	000000	000000
	(2.)	Total Hardness		mg/l		85	35	200	600
	(3.)	Fluoride		mg/l		0.6	0.02	1	1.5

				l						
	(4.)	Heavy Metals	Cadmium	mg/l		0.0025	0.0025	0.003	0	
	(5.)	Heavy Metals	Lead	mg/l		0.01	0.01	0.01	0	
	(6.)	Heavy Metals	Chromium	mg/l		0.01	0.01	0.05	0	
	(7.)	Heavy Metals	Mercury	mg/l		0.001	0.001	0.001	0	
	(8.)	pH		NA		7.37	6.95	6.5	8.5	
	(9.)	TDS		mg/l		128	61	500	2000	
	(10.)	Heavy Metals	Zinc	mg/l		0.08	0.01	5	15	
	(11.)	Heavy Metals	Nickel	mg/l		0.01	0.01	0.02	0	
	(12.)	Chlorides		NA		28.1	9.5	250	1000	
	(13.)	Heavy Metals	Arsenic	mg/l		0.01	0.01	0.01	0.05	
	21	Details of Surface Water monitoring								
		No. of Surface Water monitoring locations					8			
S. No.		Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)		pH		NA		7.66	7.01	C		
(2.)		COD		mg/l		24	8	B		
(3.)		BOD		mg/l		7	3	B		
(4.)		DO		mg/l		6.7	4.3	C		
22	Details of Ground Water Table									
	Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl))					From 2.46 To 2.47				
	Range of Water Table Post-Monsoon Season (meters below ground level (m bgl))					From 0.52 To 0.53				
	Whether Ground Water Intersection will be there?					No				
23	Details of Water Requirement (During Operation)									
	Source	Required Quantity	Distance from Source	Mode of Transport	Method of withdrawal	Permission details	Permitted quantity			

	Surface	204.93	0	Pipeline	Supply by MIDC Pipeline	14 Aug 2019	204.93	
24	Waste Water Management(During Operation)							
	Source	Quantity of Waste Water Generated in KLD	Treatment Capacity in KLD	Treatment Method	Mode of disposal	Quantity of Treated Water Used in Recycling/Reuse in KLD	Quantity of Discharged Water in KLD	
	Domestic activity	2.0	105	Subjected to aeration tank of ETP	Reuse within the Plant & Recycling	2		
	Boiler blow down	4.2	105	Full fledged ETP comprising of primary, secondary & tertiary treatment scheme	Reuse within the Plant & Recycling	4.2		
	Process HCOD-HTDS	36.42	55	Stripper MEE	Reuse within the Plant & Recycling	36.42		
	Process LCOD-LTDS	24.28	105	Full fledged ETP comprising primary, secondary & tertiary treatment scheme	Reuse within the Plant & Recycling	24.28		
	Cooling Tower blow down	20.70	105	Full fledged ETP comprising of primary, secondary & tertiary treatment scheme	Reuse within the Plant & Recycling	20.70		
	Total Waste Water Generation			87.6 KLD				

	Total Discharged Water				0		
	Total Reused Water				87.6 KLD		
25	Solid Waste Generation/Management						
	Sl	Name of the Waste	Type of Waste	Quantity (TPA)	Distance for disposal site in Km	Mode of Transport	Mode of disposal
	1	Empty drums, Carboys & Containers	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	100	30	Road	Sale to MPCB authorized vendors
	2	MEE Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	860.4	30	Road	CHWTSDf or sale to MPCB Authorized Vendors
	3	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	120	30	Road	-
26	Air Quality Impact Prediction						
	Sl	Criteria Pollutants	Baseline Concentration (Micro Gram per Meter Cube)	Distance of GLC in Km	Incremental Concentration (Micro Gram per Meter Cube)	Total GLC	Prescribed Standard
	1	PM10	87	2	0.04	87.05	100
	2	PM2.5	46.2	2	0.005	46.206	60
	3	SO2	34.6	0	0.1	34.8	80
	4	NOx	42.1	0	0.08	42.19	80
27	Stack details						
	Sl	Source	Fuel	Stack height in m	Stack diameter in m	Pollutants	Emissions
	1	Stack No.1	NA	4	0.2	Others	Toluene & THF
	2	Stack No.2	NA	4	0.2	Others	Bromine
28	Power Requirement						
	Quantity (kVA))				500		
	Source				MSEDCL		

	Standby Arrangement (Details of DG Sets)	1X500 KVA
	Stack Height (in m)	4.5 m
29	Total land requirement for the project	0.65
30	Green belt	
	(a)Total Area of Green Belt	0.2161
	(b)Percentage of Total Project Area	33.25
	(c)No. of Plants to be Planted	320
	(d)Funds Allocated for Plantation	600000.00
31	Ecological and environmental senility within 10 Km	
	Critically Polluted Areas identified by CPCB	Nil
	Wildlife Sanctuaries	Nil
	Wildlife Corridors	Nil
	Notified protected Areas	Nil
	Eco-sensitive Areas	Nil
	Eco-sensitive Zones	Nil
	Archaeological Sites	Shiv Mandir at 3.74 Km
	Defence Installations	Ambernath Ordnance Factory at 5.55Km
	Forests	Near Bohonoli at 2.34 Km
32	Whether any Forest Land involved in the proposal?	No
33	Whether R&R involved in the proposal?	No
34	Total manpower requirement	50
35	Project Benefits	
	Environmental	1. The project will be ZLD activity, treated effluent will be completely reused. 2. Project is having membership of Mumbai Waste Management Ltd. - CHWTSDF. 3. Solvent recovery will be acheived 4. Green belt will be developed in 2161.00 sq.m. 5. Project plot specific Rain Water Harvesting will be implemented.
	Social	1. Project activity will generate employment for 50 nos. 2. Indirect employment opportunities will be generated in vicinity due to project activity. 3. Locals will be priorotized for employment. 4. Need based CER activities will be implemented in surrounding area, budgetary allocation for implementation of CER activities is 50.0 lakhs.
	Financial	1. The product to be manufactured is export oriented also, it will lead to earning of Foreign Exchange for Country & State.
36	Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up?	No
37	CRZ Specific Details	Not applicable
38	Whether any Direction issued under EPA Act/Air Act/Water Act?	No

39	Details of EIA Consultant	
	(i)Accreditation No.	NABET/EIA/1821/RA 0121
	(ii)Name of the EIA Consultant	M/s Sadekar Enviro Engineers Pvt. Ltd.
	(iii)Address	Plot No. A - 95, Road no. 16, Near MSEB, Kisan Nagar Road, Opp. Petrol Pump, Wagale Estate, MIDC Area, Thane West, Maharashtra - 400604.

13.3.2: The committee after detailed presentation noted that:

- Standard Terms of Reference for the project was issued on 2nd August, 2019. Public hearing is exempted as the project site is located in the notified Industrial area/estate.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Ulhas River is flowing at a distance of 4.7 km in East direction.
- Total water requirement is estimated to be 105.27 cum/day, proposed to be met from MIDC water supply. Effluent of 87.6 cum/day shall be treated in ETP/MEE/RO and treated water shall be reused for plant requirement. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- Stack of at least 6m height above roof shall be provided to the DG sets. For boiler/thermic fluid heater, stack height of 37 m shall be installed for controlling the particulate emissions within the statutory limits.
- Storage of raw materials shall be limited to a maximum of 6 days and occupational and health management shall be thoroughly implemented.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components

13.3.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-*

A. Specific Conditions:-

- No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides*
- Solvent management shall be carried out as follows:*
- Reactor shall be connected to chilled brine condenser system.*
- Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
- The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
- Solvents shall be stored in a separate space specified with all safety measures.*
- Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
- Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
- All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- Storage of raw material shall be restricted to 6 days only*
- Stack of at least 6m height above roof shall be provided to the DG sets. For boiler/thermic fluid heater, stack height of 37 m shall be installed for controlling the particulate emissions within the statutory limits*

B. General Conditions:-

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Total fresh water requirement shall not exceed 105.27cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA in this regard.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

- v. *The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.*
- vi. *The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.*

IV. Noise monitoring and prevention

- i. *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- ii. *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- iii. *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time*

V. Energy Conservation measures

- i. *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- i. *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- ii. *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- iii. *The company shall undertake waste minimization measures as below:-*
 - a. *Metering and control of quantities of active ingredients to minimize waste.*
 - b. *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - c. *Use of automated filling to minimize spillage.*
 - d. *Use of Close Feed system into batch reactors.*
 - e. *Venting equipment through vapour recovery system.*
 - f. *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Green Belt

- i. *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

VIII. Safety, Public hearing and Human health issues

- ii. *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- iii. *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- iv. *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- v. *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- vi. *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- vii. *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places*

IX. Corporate Environment Responsibility

- i. As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

- ix. *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- x. *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- xi. *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- xii. *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- xiii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiv. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.13.3.3

Proposed Naphtha Hydro Treatment Unit (NHDT) & 90 KTPA Semi Regenerative Type Catalytic Reforming Unit (CRU) at Guwahati Refinery (Assam) by M/s Indian Oil Corporation Limited - Environmental Clearance

[IA/AS/IND2/115068/2017, J-11011/197/2017-IA.II(I)]

13.3.3.3 The proposal is for environmental clearance for the proposed Naphtha Hydro Treatment Unit (NHDT) & 90 KTPA Semi Regenerative Type Catalytic Reforming Unit (CRU) at Guwahati Refinery (Assam) by M/s Indian Oil Corporation Limited. The project activity covered under item 4(a) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1	(a)Name of the project(s)	Proposed Naphtha Hydro Treatment Unit (NHDT) & 90 KTPA Semi Regenerative Type Catalytic Reforming Unit (CRU)
	(b)Name of the Company / Organisation	INDIAN OIL COPERATION LIMITED
	(c)Registered Address	Guwahati Refinery,IOCL,Noonmati, Guwahati,Assam.,Kamrup,Assam-781020

(d)Legal Status of the Company Central PSU
(e)Joint Venture No

Address for the correspondence:

(a)Name of the Applicant Gayatri Laskar
(b)Designation (Owner/ Partner/ CEO) Deputy Manager (HSE)
2. (c)Address Guwahati Refinery,IOCL, Noonmati, Guwahati,Assam.,Guwahati,Kamrup,Assam-781020
(d)Pin code 781020
(e)E-mail laskargm@indianoil.in

Category of the Project/Activity as per Schedule of EIA Notification,2006:

(a)Project/Activity **4(a) Petroleum refining industry**
(b)Category **A**
(c)Proposal Number **IA/AS/IND2/115068/2017**
3. (d)Master Proposal Number(Single Window) **SW/115065/2019**
(e)EAC concerned (for category A Projects only) **Industrial Projects - 2**
(f)Project Type **Expansion**

Location of the Project:

(a)Plot/Survey/Khasra No. 54, Dag No 1
(b)Pincode 781020
4. (c)Bounded Latitudes (North) FROM 26.180744 To 26.189172
(d)Bounded Longitudes (East) FROM 91.806376 To 91.811418
(e)Survey of India Topo Sheet No. 78 N/11, 12, 15 and 16

(a)Number of States in which
5. Project will be Executed 1
(b)Main State of the project Assam

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Assam	Kamrup	Guwahati	Noonmati

Details of Terms of Reference (ToR)/EC:

6. (a)MoEF&CC / SEIAA File Number J-11011/197/2017-IA.II(I)
(b)Details of ToR F. No. J-11011/197/2017-IA.II (I), Dated 07-July-2017

(c)Details of earlier EC Vide J-11011/1/2000- IA-II(I) dated 24.04.2000; J11011/215/2007- IA-II(I) dated 07.02.2008; and J-11011/71/2012-IA.II(I) dated 22.01.2015

(d)Previous EC Letter NIL

Details of Public Consultation:

7. (a)Whether the Project Exempted from Public Hearing? Yes
- (b)Reason Public hearing is exempted under para 7(ii) of EIA Notification, 2006

Details of Project Configuration/Product:

8. **Not Applicable**

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

(a)Details of certified report on compliance of earlier environmental clearance condition

- (i)Certified Compliance By Regional officer, Shilong
9. (ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on Shilong
- (iii)Letter No. Monitoring report dated 12.04.2018
- (iv)Status of Compliance Partially Complied
- (v)Date of site visit 12.04.2018

(b)Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	CFO	4000	0	4000	Others	KL	Road,Rail	
(2.)	HDT HSD	160000	0	160000	Others	KL	Road,Rail	
(3.)	HDT SKO	45000	0	45000	Others	KL	Road,Rail	
(4.)	MS component	161000	0	161000	Others	KL	Road,Rail	
(5.)	HDT HSD	160000	0	160000	Others	KL	Road,Rail	

(6.)	SKO	36000	0	36000	Others	KL	Road,Rail	
(7.)	MRN	4000	0	4000	Others	KL	Road,Rail	
(8.)	HDT ATF	5000	0	5000	Others	KL	Road,Rail	
(9.)	TCO	2000	0	2000	Others	KL	Road,Rail	
(10.)	HDT ATF	5000	0	5000	Others	KL	Road,Rail	
(11.)	MS	122400	0	122400	Others	KL	Road,Rail	
(12.)	EHN	700	0	700	Others	KL	Road,Rail	
(13.)	LDO	10400	0	10400	Others	KL	Road,Rail	
(14.)	AFT	18000	0	18000	Others	KL	Road,Rail	
(15.)	Crude Oil	90000	0	90000	Others	KI	Road,Rail	
(16.)	HSD	457000	0	457000	Others	KL	Road,Rail	
(17.)	Naptha	65000	0	65000	Others	KL	Road,Rail	
(18.)	IFO	20000	0	20000	Others	KL	Road,Rail	
(19.)	Light Naptha	20000	0	20000	Others	KL	Road,Rail	
(20.)	RCO	245000	0	245000	Others	KL	Road,Rail	
(21.)	SLOPS	31500	0	31500	Others	KL	Road,Rail	
(22.)	CLO	2000	0	2000	Others	KL	Road,Rail	
(23.)	HDT HSD	160000	0	160000	Others	KL	Road,Rail	
(24.)	RFO	5000	0	5000	Others	KL	Road,Rail	
(25.)	RN	12000	0	12000	Other	KL	Road,Rail	

)					s		
(c)Details of Configuration							
S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks		
(1.)	Steam	0.66	0	0.66	TPH		
(2.)	BFW	4.54	0	4.54	TPH		
(3.)	Power	817.9	0	817.9	kW		
(4.)	Cooling water	436	0	436	KLPH		
<u>Details of Consent to Operate</u>							
(i)Whether Consent to operate obtained ?		NA					
9.1.	(ii)Date of Issue	05 Mar 2019					
	(iii)Valid Upto	31 Mar 2020					
	(iv)File No.	WB/GUW/T-3038/Pt-I/18-19/40/1973					
	(v)Application No.	PCB/F50/KM/005096/11/2018					
<u>Project Cost:</u>							
	(a)Total Cost of the Project at current price level (in Crores)	296					
	(b) Funds Allocated for Environment Management (Capital) (in Crores)	0.09					
10.	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	2.22					
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	2.07					
Whether project attracts the General Condition specified in the Schedule of EIA Notification ?							
11.		Yes					
	a)Protected areas notified under the wildlife (Protection) Act, 1972	Yes					
Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?							
12.		No					

(5.)	pH			NA		7.21	6.58	6.5	8.5
(6.)	Fluoride			mg/l		0.48	0.2	1	1.5
(7.)	Chlorides			mg/l		64.33	13.86	250	1000

14.3. No. of Surface Water monitoring locations : 08

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	DO		mg/l		6.6	6.2	A
(2.)	COD		mg/l		32	7	D
(3.)	BOD		mg/l		2	1	A
(4.)	pH		NA		7.51	6.85	A

14.4. No. of Ambient Noise monitoring locations : 08

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	59.3	44.1	70
(2.)	Leq(Day)	A-weighted decibels(dB(A))	67.1	53.9	75

14.5. No. of Soil Sample Monitored locations : 08

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	Electric Conductivity	Others	ÂµS/cm	384	196
(2.)	N(Nitrogen)	Milligram per Kilogram		212.26	98.54
(3.)	K(Potassium)	Milligram per Kilogram		184	97
(4.)	pH			7.24	6.28
(5.)	P(Phosphorus)	Milligram per Kilogram		99.62	38.24

Details of Ground Water Table:

- 14.6. (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 2 To 30

(b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 2 To 30

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. N o.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Surface		13550.4	3	Pipeline	Others	Pipeline	GR/HSE/Water Cess/319/18-19/WC-1	09 Aug 2018	16260

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. N o.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)
1	Domestic sewage and Effluent	4952.4	13200	CETP	Discharge into Surface Water Body, Reuse within the Plant & Recycling, Others	Storm water channel	3522.48	1429.92

(a)Total Waste Water Generation 4952.4

16.1. (b)Total Discharged Water 1429.92

(c)Total Reused Water 3522.48

17. Solid Waste Generation/Management								
S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(Km)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Organic Waste	Municipal Solid Waste	14.7095	Tons	1.2	Road	Others	Composting
(2.)	Inorganic waste	Municipal Solid Waste	20.7685	Tons	12	Road	Authorized Recyclers	
(3.)	Spent catalyst	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	23.47	Tons	12	Road	Treatment, Storage and Disposal Facility(TSDF)	
18.								
18.1. Air Quality Impact Prediction								
S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard	
(1.)	PM10	Microgram per Meter Cube	72.9	0	0.91	73.82	100	
(2.)	PM2.5	Microgram per Meter Cube	36.3	0	0.91	37.21	60	
(3.)	NOx	Microgram per Meter Cube	33.6	0	6.47	40.071	80	
(4.)	SO2	Microgram per Meter Cube	13	0	15.69	28.691	80	
18.2. Stack Details								

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	TPS unit 5	FO	58	2.3	PM10		1.03
(2.)	TPS unit 5	FO	58	2.3	NOx		3.47
(3.)	SRU	FO	45	0.35	PM10		0
(4.)	SRU	FO	45	0.35	SO2		0.24
(5.)	SRU	FO	45	0.35	NOx		0.08
(6.)	HGU	FO	48	1.53	SO2		2.16
(7.)	CRU (Naphtha Hydrotreater)	FO	42	1.8	PM10		50
(8.)	CRU (Naphtha Hydrotreater)	FO	42	1.8	SO2		850
(9.)	HGU	FO	48	1.53	NOx		1.43
(10.)	HGU	FO	48	1.53	PM10		0.3
(11.)	TPS Unit 5	FO	58	2.3	SO2		6.45
(12.)	CRU (Naphtha Hydrotreater)	FO	42	1.8	NOx		350

Power Requirement:

19. (a)Quantity (Kilo Volt Amps (kVA)) 17275
(b)Source CPP
(c)Standby Arrangement (Details of DG Sets) Nil
(d)Stack Height (in m) 0

Land Ownership Pattern:

20. (a)Forest Land 0
(b)Private Land 0
(c)Government Land 198.3
(d)Revenue Land 0
(e)Other Land 0

Total Land		198.3		
<u>Present Land Use Breakup of the Study Area in Ha:</u>				
21.	(a)Agriculture Area		3815	
	(b)Waste/Barren Land		110	
	(c)Grazing/ Community Land		714	
	(d)Surface Water Bodies		6198	
	(e)Settlements		9422	
	(f)Industrial		36	
	(g)Forest		13643	
	(h)Mangroves		0	
	(i)Marine Area		0	
	(j)Others : other		1065	
Total		35003		
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Others	Total Plant area	198.3	Ha
Total		198.3		
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	ESAs	Nil	0	Nil
(2.)	ESZs	Nil	0	Nil
(3.)	Critically Polluted Area	Nil	0	Nil
(4.)	NPA	Anchang Wild life sanctuary	3.51	E
(5.)	WLS	Nil	0	Nil
(6.)	Wildlife Corridors	Nil	0	Nil

(7.)	Corridors	Nil	0	Nil	
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23.2. Details of Environmental Sensitivity :

S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		Nil	0	Nil
(2.)	Archaeological Sites		Nil	0	Nil
(3.)	Forest		Anchang RF	3.5	E

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired 0

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R Yet To Start

28. **Details of Presence of Schedule-I Species:**

(a)Whether there is Presence of No

Schedule-I Species ?

(b)Whether conservation plan for
Schedule-I Species has been No
prepared ?

(c)Whether conservation plan for
Schedule-I Species has been No
approved by competent authority ?

Details of Presence of Water Bodies in Core Area:

(a)Whether there is Presence of
Water Bodies in Core Area ? No

29. (b)Whether there is Diversion
Required ? No

(c)Whether permission has been
obtained from competent authority No
?

Details of Presence of Water Bodies in Buffer Area:

(a)Whether there is Presence of
Water Bodies in Buffer Area ? Yes

30. (i)Details of Water Bodies in Buffer
Area Brahmaputra River

(ii)Direction of Water Bodies in
Buffer Area North

(iii)Distance of Water Bodies in
Buffer Area 2.13

Manpower Requirement:

(a)Permanent Employment-During
Construction 0

(b)Permanent Employment-During
Operation 1554

31. (c)Temporary Employment- During
Construction 300

(d)Temporary Employment- During
Operation 0

(e)No. of working days 365

(f)Total Manpower 1854

32. **Green Belt in Ha:**

S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	82.798	0	82.798
(2.)	Percentage of	41.76	0	41.76

	Total Project Area			
(3.)	Funds Allocated	900000	0	900000
(4.)	No. of Plants	124197	0	124197
33. <u>Project Benefits</u>				
S. No.	Type of Project Benefits	Details of Project Benefits		
NIL				
34. CRZ Specific Details : Not Applicable				
35. Sector Specific Details : Not Applicable				
<p><u>Details of Court Cases:</u></p> <p>36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>(a)Have you hired Consultant for preparing document? Yes</p> <p>(i)Accreditation No. NABET/EIA/1619/RA 0083</p> <p>(ii)Name of the EIA Consultant HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI</p> <p>38. (iii)Address Hubert Enviro Care Systems (P) Ltd. A-21, (Behind Lions Club School) III Phase, Thiru Vi Ka Industrial Estate. Guindy, Chennai - 600 032.</p> <p>(iv)Category of Accreditation A</p> <p>(v)Sector of Accreditation Industrial Projects - 2</p> <p>(vi)Validity of Accreditation 13 Oct 2019</p>				

13.3.3.3 The EAC, after presentation by the PP, noted the following

- Guwahati Refinery of IoCL established in 1962 with 0.75 MTPA. Refining capacity upgraded to 1.0 MTPA with Hydrotreater, ISOM (MSQ) unit and INDadeptG (demonstration of indigenous technology) units. Refinery is currently able to produce Auto Fuels of BS-IV Grade.
- The details of earlier ECs as follows:

S. No	EC File No	Installation	Year
1	J-11011/1/2000-IA-II(I)	ISOSIV & INDMAX	2000
2	J-11011/215/2007-IA-II(I)	BS-IV	2008
3	J-11011/71/2012-IA-II(I)	Proposed INDAdaptG	2015

- The main objective of this project is to produce a high octane number reformat by octanizing (reforming) process.
- It was observed from the configuration and product details given in form-2 that the PP did not integrate the facilities exist already in the plant premises. It was submitted as expansion but in the title it was addressed only the present proposal.
- The committee of the view that since the present proposal is to produce a high octane number reformat by octanizing (reforming) process, logically shall be termed as change in the product mix.
- The PP has claimed the exemption from conduct of fresh public consultation, but did not substantiated the claim.
- The committee felt that the project proponent has not gone through the EIA/EMP submitted and form that has made to the ministry, since the objective of the instant proposal was not reflecting.
- In view of the above, the committee of the view that the PP may submit the revised documents and Form envisaging the facilities that are available in order to recommend for comprehensive EC.
- Terms of Reference for the project was issued on 7th July, 2017. Public hearing for the project has been exempted as per para 7 (ii) of the EIA Notification, 2006.
- Amchang Wildlife sanctuary is located at 3.5km towards East from the project site. Brahmaputra river is flowing at a distance of 2.13 km in North direction.
- Total water requirement is estimated to be 13550.4 cum/day, which includes fresh water requirement of 9787.92 cum/day, proposed to be met from Brahmaputra River.
- Effluent of 206.35 cum/hr will be treated through combined ETP. Effluent of 16.58 cum/hr is discharged into river through pipelines after meeting the standard.
- Certified compliance report on the existing EC conditions has been forwarded by the Ministry's Regional Office after conducting site visit on 12th and 13th April, 2018

13.3.3.3 *The EAC, after deliberations, asked for clarification/inputs and revision in the EIA/EMP report in respect of the following:-*

- Detailed effluent treatment plan with Zero Liquid Discharge system.*
- Revised water balance.*
- Action taken report to be submitted and be forwarded by the Ministry's Regional Office on the non-complied points in the existing EC conditions.*
- Occupational health and preventive plan.*
- Wildlife conservation plan as per the ToR.*
- Recommendations of the Standing Committee of NBWL for the proposed project.*
- Cumulative EMP for the Refinery.*
- Plan for emission control at 100% efficiency.*
- Details existing/proposed coke boiler project in the refinery, if any, and plan for mitigation measures.*
- CER plan.*
- The proposal was therefore returned in the present form.*

Agenda No.13.3.4

Expansion of Dyes & Dye Intermediates manufacturing (12.0 MTPM to 90 MTPM) at Survey No. 362 (Old Survey No. 194/1), Village Sokhada, Tehsil Khambhat, District Anand (Gujarat) by M/s Tulsi Intermediates Pvt Ltd - Environmental Clearance

[IA/GJ/IND2/116802/2019, IA-J-11011/12/2019-IA-II(I)]

13.3.4.1 The proposal is for environmental clearance for the proposed expansion of Dyes & Dye Intermediates manufacturing (12.0 MTPM to 90 MTPM) at Survey No. 362 (Old Survey No. 194/1), Village Sokhada, Tehsil Khambhat, District Anand (Gujarat) by M/s Tulsi Intermediates Private Limited. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Tulsi Intermediates Pvt. Ltd.
	(b)Name of the Company / Organisation	TULSI INTERMEDIATES PVT. LTD.
1.	(c)Registered Address	S. no. 362 (Old S. No. 194/1), Opp. Ambica Chemicals, Villag: Sokhda, Ta.: Khambhat, Dist.: Anand,Anand,Gujarat-388620
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Bhagyesh Bhatt
	(b)Designation (Owner/ Partner/ CEO)	Authorizedperson
2.	(c)Address	S.No.362/Old s.no.194/1, Opp. Ambica Chemical, Vaduchi mata road, Sokhda, Tal. Khambhat, Dist. Anand,,Khambhat,Anand,Gujarat-388620
	(d)Pin code	388620
	(e)E-mail	sahed.shaikh@yahoo.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b)Category	A
3.	(c)Proposal Number	IA/GJ/IND2/116802/2019
	(d)Master Proposal Number(Single Window)	SW/116595/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2

(f)Project Type		Expansion					
<u>Location of the Project:</u>							
(a)Plot/Survey/Khasra No.		Survey No.362 (Old S. no. 194/1), Village: Sokhda,					
4.	(b)Pincode	388620					
	(c)Bounded Latitudes (North)	FROM 22.34972 To 22.35055					
	(d)Bounded Longitudes (East)	FROM 72.58777 To 72.58777					
	(e)Survey of India Topo Sheet No.	F43G11					
5.	(a)Number of States in which Project will be Executed	1					
	(b)Main State of the project	Gujarat					
Details of State(s) of the project							
S. No.	State Name	District Name	Tehsil Name	Village Name			
(1.)	Gujarat	Anand	Khambhat	Sokhda			
<u>Details of Terms of Reference (ToR)/EC:</u>							
(a)MoEF&CC / SEIAA File Number		IA-J-11011/12/2019-IA-II(I)					
6.	(b)Details of ToR	Standard Tor was issued vide IA-J-11011/12/2019-IA-II(I) dated 13.02.2019					
	(c)Details of earlier EC	The existing project is operating with consent under Air and Water Acts					
<u>Details of Public Consultation:</u>							
	(a)Whether the Project Exempted from Public Hearing?	No					
7.	(b)Whether details of Public Hearing available?	Yes					
	(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above	Yes					
7.1. Details of Public Hearing							
S I	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Other Designation of Presiding Officer

1	Date of Advertisement : 26 Jun 2019	Date : 31 Jul 2019	Distance of Public Hearing Venue from the Proposed Project : 3.5	22 Gam Levuva Patidar Samaj ni wadi, Press road, khambhat, Anand.	State : Gujarat District : Anand Tehsil : Khambhat Village : Khambhat	168	Help to the nearby people, employment opportunity of local people, etc.	Resident Addition al collector & Addition al district Magistra te, Anand
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Details of Project Configuration/Product:

8.

Details Not Applicable

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

(a)Details of certified report on compliance of earlier environmental clearance condition

(i)Certified Compliance By SPCB

9. (ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on

(iii)Letter No. GPCB/CCA-AND-240(2)/ID-17690

(iv)Status of Compliance Compiled

(b)Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product
(1.)	4 Sulpho Hydrazone	7	23	30	Others	MT/Month	Road
(2.)	PTPMP / PCEP / MNPT / PNBA / Sulpho OAVS / etc.	00	60	60	Others	MT/Month	Road
(3.)	Para Nitro	3	-3	0	Others	MT/Month	Road

	Toluene Ortho Sulphonic Acid						
(4.)	4 Sulpho Phthalic Acid	2	-2	0	Others	MT/Month	Road

(c)Details of Configuration

S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion
(1.)	Scrubbers	Two stage Alkali (1 No.)	Two Stage Alkali (1 No.)	Two Stage Alkali (2 Nos.)
(2.)	MS/RL/BL Dumping	10 KL(2Nos.),12 KL(2Nos.),17KL(1No.), 6KL(1No.)	10 KL(4Nos.),12 KL(6Nos.)	10KL(6Nos.),12KL(8 Nos.),17KL(1No.),6KL(1No.)
(3.)	Sulphonator Reactor-MS	7 KL (2 Nos.), 3.5 KL (1 no.)	7 KL (2 Nos.), 5 KL (1 no.)	7 KL (4 Nos.), 3.5 KL (1 no.), 5 KL (1 no.)
(4.)	Hydrolysis Vessels M.S.	15 KL(1 No.)	12 KL (1 No.)	15 KL(1 No.) , 12 KL (1 No.)
(5.)	Centrifuge	36" (5 Nos.)	36" (5 Nos.)	36" (10 Nos.)
(6.)	MS Tank	25 KL (3 Nos.), 10KL (2 Nos.)	25 KL (2 Nos.), 10KL (1 Nos.)	25 KL (5 Nos.), 10KL (3 Nos.)
(7.)	Blender	00	10 KL (2 Nos.)	10 KL (2 Nos.)
(8.)	Ball Mill	00	10 KL (2 Nos.)	10 KL (2 Nos.)
(9.)	Filter Nutch	10 KL (2 Nos.)	10 KL (4 Nos.)	10 KL (6 Nos.)
(10.)	Boiler	0.8 THP (1 Nos.)	00	0.8 THP (1 Nos.)
(11.)	Hot Air Generator	8 Lakhs Kcal/hr.(1 Nos.)	00	8 Lakhs Kcal/hr.(1 Nos.)
(12.)	Spray Dyer	1000 Lit/hr. (1 Nos.)	00	1000 Lit/hr. (1 Nos.)
(13.)	HDPE Tank	5 KL (4 Nos.)	5 KL (4 Nos.)	5 KL (8 Nos.)
(14.)	Cooling Tower	250 TR (1 No.)	250 TR (1 No.)	250 TR (2 Nos.)
(15.)	Filter Press	36" (1 No.)	36" (1 No.)	36" (2 Nos.)

Details of Consent to Operate

- 9.1. (i)Whether Consent to operate obtained? NA
- (ii)Copies of all Consent to operate obtained since inception NA

(iii)Date of Issue 21 Jun 2016
 (iv)Valid Upto 17 Nov 2020
 (v)File No. GPCB/CCA-AND-240(2)/ID-17690
 (vi)Application No. 100577

Project Cost:

- (a)Total Cost of the Project at current price level (in Crores) 4.5
 (b) Funds Allocated for Environment Management (Capital) (in Crores) 1.27
 10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 3.75
 (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 1.05

11. Whether project attracts the General Condition specified in the Schedule of EIA Notification ? No

12. Whether project attract the Specific Condition specified in the Schedule of EIA Notification ? No

Raw Material / Fuel Requirement:

13. (a)Proposed quantity of raw material/fuel 1921.44
 (b)Existing quantity of raw material/fuel 126.15
 (c)Total quantity of raw material/fuel 2047.59

13.1. Raw Material / Fuel Profile

S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site	Type of Linkage	Other Type of Linkage
(1.)	As per attached sheet	2047.59	Tons per Annum		Local Market	Road		25	Open Market	

14. Baseline Data :

(a)Period of Base Line Data Collection			FROM 01 Jan 2019 To 31 Mar 2019					
(b)Season			Winter					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 08								
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard	
(1.)	PM10		Micro Gram per Meter Cube	80.4	56.4	76.48	100	
(2.)	PM2.5		Micro Gram per Meter Cube	51.9	32.8	46.58	60	
(3.)	NOx		Micro Gram per Meter Cube	22.5	12.5	19.86	80	
(4.)	SO2		Micro Gram per Meter Cube	21.2	10.5	17.85	80	
14.2. No. of Ground Water monitoring locations : 08								
S. No.	Criteria Pollutants		Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TSS		mg/l		10	5	00	00
(2.)	Fluoride		mg/l		0.7	0.46	1.0	1.5
(3.)	pH		Others	pH Unit	7.75	7.37	8.5	8.5
(4.)	Total Hardness		mg/l		994	507	300	600
(5.)	Chlorides		mg/l		2623	771	250	1000
(6.)	TDS		mg/l		5157	1619	500	2000
14.3. No. of Surface Water monitoring locations : 08								
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body	
(1.)	COD		mg/l		25	5	A	
(2.)	pH		mg/l		7.82	7.36	A	
(3.)	DO		mg/l		6.8	4.6	A	
(4.)	BOD		mg/l		10	5	A	
14.4. No. of Ambient Noise monitoring locations : 09								
S.	Parameter		Unit	Maximum	Minimum	Prescribed		

No.			Value	Value	Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	54.7	40.9	70
(2.)	Leq(Day)	A-weighted decibels(dB(A))	57.6	51.8	75

14.5. No. of Soil Sample Monitored locations : 08

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	N(Nitrogen)	Milligram per Kilogram		161	131
(2.)	P(Phosphorus)	Milligram per Kilogram		51	32
(3.)	pH	Others	pH Unit	7.90	7.24
(4.)	K(Potassium)	Milligram per Kilogram		346	194
(5.)	Electric Conductivity	Millisiemens per Centimetre		1.54	1.46

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 5 To 8

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 20

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Other Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
1	Ground Water		35	00	Pipeline		Others	Bore well	21-4/4941/GJ/IND/2019	29 Mar 2019	35

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	Domestic	2.5	5	Soak Pit	Others	Soak Pit	0	2.5
(2.)	Industrial	35.0	40.0	ETP-RO-SD	Others	ZLD	20	15

(a) Total Waste Water Generation 37.5
16.1. (b) Total Discharged Water 17.5
(c) Total Reused Water 20

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal
1	Spray Dryer Salt	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	192	Tons	50	Road	Treatment, Storage and Disposal Facility(TSDF)
2	Discarded Liners / Bags	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	240	Tons	25	Road	Authorized Recyclers
3	Spent H2SO4 (70-75%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	6000	Kilolitre	15	Road	Sold to actual user

		t rules 2016)						
4	Sodium bisulfite (40-45 %)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2184	Kilolitre	25	Road	Sold to actual user	
5	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	240	Tons	50	Road	Treatment, Storage and Disposal Facility(TSDF)	
6	Used oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	12	Kilolitre	50	Road	Authorized Recyclers	
7	Discarded Drums/Barrels	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1250	Tons	25	Road	Authorized Recyclers	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	SO ₂	Microgram per Meter Cube	14.11	1.41	1.06	15.18	80
(2.)	NO _x	Microgram per	16.26	1.41	0.665	16.93	80

		Meter Cube					
(3.)	PM10	Microgram per Meter Cube	69.80	1.41	1.549	71.35 0	100
(4.)	PM2.5	Microgram per Meter Cube	41.61	1.41	1.549	43.16	60

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Reaction Vessel 1 - Existing	--	11	0.300	SO2		25 mg/nm3
(2.)	Reaction vessel 2, proposed	--	11	0.300	Others	SO2, NOx	25 mg/nm3, 20 mg/Nm3
(3.)	Boiler (0.8 TPH)	Bio coal/ Coal - 4.5 TPD	15	0.375	Others	PM, SO2, Nox	110 mg/nm3, 30 mg/Nm3,
(4.)	Spray Dryer (1000 Liter/Hr)	Bio Coal/Coal - 4.0 TPD	15	0.450	Others	PM, SO2, NOx	45 mg/nm3, 20 mg/nm3, 15 mg/nm3

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 125
 (b)Source MGVCCL
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) Not Applicable
 (e)Stack Height (in m) 00

Land Ownership Pattern:

20. (a)Forest Land 00

	(b)Private Land	0.3500		
	(c)Government Land	00		
	(d)Revenue Land	00		
	(e)Other Land	00		
	Total Land	0.3500		
	<u>Present Land Use Breakup of the Study Area in Ha:</u>			
	(a)Agriculture Area	00		
	(b)Waste/Barren Land	0.00018		
	(c)Grazing/ Community Land	0.0		
	(d)Surface Water Bodies	0.00090		
	(e)Settlements	0.0		
21.	(f)Industrial	0.00041		
	(g)Forest	0.0		
	(h)Mangroves	00		
	(i)Marine Area	00		
	(j)Others : Residential, crop land, etc	0.02999		
	Total	0.03148		
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Main Plant		0.080	
(2.)	Green belt		0.1155	
(3.)	Others	Internal Road, Open Area	0.054	
(4.)	Built Up Area		0.1005	utilities, storage area, etc
Total			0.35	
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	NPA	None within 10 Km	00	None within 10 Km
(2.)	Corridors	None within 10 Km	00	None within 10 Km

(3.)	Wildlife Corridors	None within 10 Km	00	None within 10 Km
(4.)	Critically Polluted Area	None within 10 Km	00	None within 10 Km
(5.)	WLS	None within 10 Km	00	None within 10 Km
(6.)	ESAs	None within 10 Km	00	None within 10 Km
(7.)	ESZs	None within 10 Km	00	None within 10 Km

23.2. Details of Environmental Sensitivity :

S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		None within 10 Km	00	None within 10 Km
(2.)	Archaeological Sites		None within 10 Km	00	None within 10 Km
(3.)	Defence Installations		None within 10 Km	00	None within 10 Km

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 00

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0.35

(b)Land yet to be acquired(Ha) 00

(c)Status of Land acquisition if not acquired Already acquired

Rehabilitation and Resettlement (R&R):

- | | | |
|-----|---|-----------|
| | (a)No. of Villages | 00 |
| | (b)No. of Households | 00 |
| 27. | (c)No. of PDFs (Project Displaced Families) | 00 |
| | (d)No. of PAFs (Project Affected Families) | 00 |
| | (e)Funds Allocated for R&R(in Rs) | 00 |
| | (f)Status of R&R | Completed |

Details of Presence of Schedule-I Species:

- | | | |
|-----|--|----|
| | (a)Whether there is Presence of Schedule-I Species ? | No |
| 28. | (b)Whether conservation plan for Schedule-I Species has been prepared ? | No |
| | (c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? | No |

Details of Presence of Water Bodies in Core Area:

- | | | |
|-----|--|----|
| | (a)Whether there is Presence of Water Bodies in Core Area ? | No |
| 29. | (b)Whether there is Diversion Required ? | No |
| | (c)Whether permission has been obtained from competent authority ? | No |

Details of Presence of Water Bodies in Buffer Area:

- | | | |
|-----|---|----|
| 30. | (a)Whether there is Presence of Water Bodies in Buffer Area ? | No |
|-----|---|----|

Manpower Requirement:

- | | | |
|-----|--|----|
| | (a)Permanent Employment-During Construction | 00 |
| | (b)Permanent Employment-During Operation | 11 |
| 31. | (c)Temporary Employment- During Construction | 15 |
| | (d)Temporary Employment- During Operation | 00 |
| | (e)No. of working days | 26 |
| | (f)Total Manpower | 26 |

32. **Green Belt in Ha:**

S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	410	745	1155
(2.)	Percentage of Total Project Area	12	21	33
(3.)	No. of Plants	102	187	289
(4.)	Funds Allocated	30000	70000	100000

33. Project Benefits

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment generation, CSR activities

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA0084
- (ii) Name of the EIA Consultant San Envirotech Pvt. Ltd., Ahmedabad
- (iii) Address 401/402/423/424/324, Medicine Market, Opp. Shefali Centre, Paldi cross Road, Ahmedabad
- (iv) Category of Accreditation A
- (v) Sector of Accreditation Industrial Projects - 2
- (vi) Validity of Accreditation 23 Dec 2019

13.3.4.2 The EAC, after presentation by the PP, noted the following

- Standard Terms of Reference for the project was issued on 13th February, 2019. Public hearing for the project has been conducted by the State Pollution Control Board on 31st July, 2019. The main issues raised during the public hearing are related to local employments, social activities, etc.

- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors, rivers etc. within 10 km from the project site.
- Total water requirement is estimated to be 55 cum/day, which includes fresh water requirement of 35 cum/day, proposed to be met from bore well. Application for ground water extraction has been submitted with the concerned authority.
- Effluent of 35 cum/day shall be treated in ETP/RO/spray dryer and treated water shall be reused for plant requirement. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The expenditure towards CER for the project would be Rs. 5 lakhs as committed by the project proponent.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing have been properly addressed by the project proponent.

13.3.4.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-*

Specific Conditions:-

- i. Solvent management shall be carried out as follows:*
 - a. Reactor shall be connected to chilled brine condenser system.*
 - b. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - c. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - d. Solvents shall be stored in a separate space specified with all safety measures.*
 - e. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - g. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- ii. All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented*

A. General Conditions:-

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989*

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier*

specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Total fresh water requirement shall not exceed 35 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- i. The green belt of at least 4-5m width (two rows) shall be developed in nearly 35% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least Rs. 5 lakhs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise

progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders

passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.12.3.5

Enhancement of Camphor and its derivatives production & increase in total land area at Sy.No. 669, 672, 670/2, 676/1 & 674/1, 667/1, 668/1, 668/2A, 667/2, 668/2, 667/2A, 668/2A & 670/1 Village Enadur, Tehsil Kancheepuram, District Kancheepuram (Tamil Nadu) by M/s Kanchi Karpooram Limited - Environmental Clearance

[IA/TN/IND2/115127/2019, IA-J-11011/143/2019-IA-II(I)]

13.3.5.1 The proposal is for environmental clearance for the proposed enhancement of Camphor and its derivatives production & increase in total land area at Sy.No. 669, 672, 670/2, 676/1 & 674/1, 667/1, 668/1, 668/2A, 667/2, 668/2, 667/2A, 668/2A & 670/1 Village Enadur, Tehsil Kancheepuram, District Kancheepuram (Tamil Nadu) by M/s Kanchi Karpooram Limited. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a) Name of the project(s)	ENHANCEMENT OF CAMPHOR AND ITS DERIVATIVES PRODUCTION & INCREASE IN TOTAL LAND AREA
	(b) Name of the Company / Organisation	M/S KANCHI KARPOORAM LTD
1.	(c) Registered Address	SF No.669,672,670/2, 676/1, 674/1, Enadur Village, Parandur Road, Karaipettai Post, Kancheepuram Taluk, Kancheepuram District Tamil Nadu 631552, Kanchipuram, Tamil Nadu - 631552
	(d) Legal Status of the Company	Private
	(e) Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a) Name of the Applicant	Dipesh Suresh Jain
	(b) Designation (Owner/ Partner/ CEO)	Executive Director
2.	(c) Address	SF No.669, 672, 670/2, 676/1 674/1, Enadur Village, Parandur Road, Karaipettai Post, Kancheepuram Taluk, Kancheepuram District Tamil Nadu Pin code 631552, Kancheepuram, Kanchipuram, Tamil Nadu-631552
	(d) Pin code	631552

(e)E-mail

admin@kanchikarpooram.com

Category of the Project/Activity as per Schedule of EIA Notification,2006:

- (a)Project/Activity **5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk**
- (b)Category **A**
3. (c)Proposal Number **IA/TN/IND2/115127/2019**
- (d)Master Proposal Number(Single Window) **SW/115126/2019**
- (e)EAC concerned (for category A Projects only) **Industrial Projects - 2**
- (f)Project Type **Expansion**

Location of the Project:

- (a)Plot/Survey/Khasra No. **669, 672, 670/2, 676/1 &674/1,667/1,668/1,668/2A,**
4. (b)Pincode **631552**
- (c)Bounded Latitudes (North) **FROM 12.875699 To 12.879730**
- (d)Bounded Longitudes (East) **FROM 79.710303 To 79.710517**
- (e)Survey of India Topo Sheet No. **57 P/9 and 57 P/13**
- (a)Number of States in which Project will be Executed **1**
5. (b)Main State of the project **Tamil Nadu**

Details of State of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
NIL				

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number **IA-J-11011/143/2019-IA-II(I)**
- (b)Date of Apply of TOR **06 Apr 2019**
- (c)Date of Issue of TOR / Standard ToR **10 May 2019**
6. (d)Details of earlier EC **M/s KanchiKarpooram Limited (KKL) a Public Limited Company is engaged in the manufacture of Camphor and Derivative Products & Incorporated in the year 1992. The unit is operating with consent under Air and water Acts**

Details of Public Consultation:

7. (a)Whether the Project Exempted **No**

from Public Hearing?	
(b)Whether details of Public Hearing available?	Yes
(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above	Yes
7.1. Details of Public Hearing	

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 08 Jun 2019	Date : 16 Jul 2019 Distance of Public Hearing Venue from the Proposed Project : 5.0	Sri Lakshmi Narayana Mahal & Party Hall	State : Tamil Nadu District : Kanchipuram Tehsil : Kancheepuram Village : Enathur	84	Nil	District Collector

8. Details of Project Configuration/Product:

8.1. Project Configuration			
S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Isomerisation reactor (KL)	2 x 6 and 2 x 12	Existing and Proposed
(2.)	Fire water Pump (m3/hr)	150	Existing
(3.)	Crude Isobornyl acetate fraction columns (mm)	2 Nos	Structured packing
(4.)	Gum Turpentine/Pinene SS Column(mm)	1 No	Structured packing
(5.)	Camphene Fractionation SS Column (mm)	1 No	Structured packing

(6.)	Camphor Distillation SS Packed Column (Nos)	2 Nos	Structured packing
(7.)	Saponification (Isobornyl acetate) reactor (KL)	2 x 6 and 3 x 12	Existing and Proposed
(8.)	Dehydrogenation reactor (KL)	3 x 3 , 1 x 7 and 2 x 12	Existing and Proposed
(9.)	Cooling Tower (m3/hr)	1x400 and 1x 300	Existing and Proposed
(10.)	Campene Esterification reactor (KL)	3 x 6 and 1 x 12	Existing and Proposed
(11.)	TFH (Wood Fire heater(MW/hr)	1 x 1.74 and 1 x 4.65	Existing and Proposed

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity		Unit	Mode of Transport / Transmission of Product	
(1.)	Camphor	550		MT/Month	Road,Rail	
(2.)	Terpeneolene / Dipentene	349.6		MT/Month	Road,Rail	
(3.)	Rosin Oil	10		MT/Month	Road,Rail	
(4.)	Spent Caustic lye	36.11		MT/Month	Road,Rail	
(5.)	Sodium Acetate Tri Hydrate	575.5		MT/Month	Road,Rail	
(6.)	Sodium Acetate as liquor and Alternate to Solid tri hydrate	193		MT/Month	Road,Rail	
(7.)	Camphor Oil	2		MT/Month	Road,Rail	
(8.)	Turpentine oil(Turpentine KATEL)	98.475		MT/Month	Road,Rail	
(9.)	Iso Bornyl Acetate	510		MT/Month	Road,Rail	
(10.)	Esters	15		MT/Month	Road,Rail	
(11.)	Longifoluenes	10		MT/Month	Road,Rail	
(12.)	Double Distilled Turpentine	30		MT/Month	Road,Rail	
(13.)	Camphene	550		MT/Month	Road,Rail	
(14.)	Rosin Size	100		MT/Month	Road,Rail	
(15.)	Pine Oil (Terpenol)	100		MT/Month	Road,Rail	

(16.)	Maleics	15		MT/Month	Road,Rail	
(17.)	Phenolics	20		MT/Month	Road,Rail	
(18.)	Pine Pitch	36.5		MT/Month	Road,Rail	
(19.)	Gum Rosin	295.62		MT/Month	Road,Rail	
(20.)	Phenolics	20		MT/Month	Road,Rail	
(21.)	Other Rosin Derivatives	20		MT/Month	Road,Rail	
(22.)	Terpenic Oil	20		MT/Month	Road,Rail	
(23.)	Pine Tar	60		MT/Month	Road,Rail	
(24.)	Iso Bornyl Crude	550		MT/Month	Road,Rail	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Details of Consent to Operate

- 9.1. (i) Whether Consent to operate obtained? NA
- (ii) Copies of all Consent to operate obtained since inception NA
- (iii) Date of Issue 23 Jul 2019
- (iv) Valid Upto 31 Mar 2020
- (v) File No. 1908223413884
- (vi) Application No. T2/TNPCB/F.0929SPR/RL/SPR/A/2019

Project Cost:

- (a) Total Cost of the Project at current price level (in Crores) 14
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 1.70
10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.14
- (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 0.3

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification** No

	?										
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?										No
<u>Raw Material / Fuel Requirement:</u>											
13.	(a) Proposed quantity of raw material/fuel										36
	(b) Existing quantity of raw material/fuel										N/A
	(c) Total quantity of raw material/fuel										36
13.1. Raw Material / Fuel Profile											
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site	Type of Linkage	Other Type of Linkage	
(1.)	36 raw materials	28773.42	Tons per Annum		Local	Road, Rail		50	Open Market		
<u>Baseline Data :</u>											
14.	(a) Period of Base Line Data Collection										FROM 02 Jul 2018 To 26 Sep 2018
	(b) Season										Post-Monsoon
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 08											
S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard					
(1.)	NOx	Micro Gram per Meter Cube	33.6	16.8	33.0	80					
(2.)	PM10	Micro Gram per Meter Cube	71.2	38.4	70.3	100					
(3.)	SO2	Micro Gram per Meter Cube	18.2	5.0	17.4	80					
(4.)	PM2.5	Micro Gram per Meter Cube	35.7	18.9	34.7	60					
14.2. No. of Ground Water monitoring locations : 08											

S. No.	Criteria Pollutants	Heavy Metal	Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH		NA	8.04	7.2	6.5	8.5
(2.)	TSS		mg/l	1	1	100	100
(3.)	Total Hardness		mg/l	611	200	200	600
(4.)	TDS		mg/l	1310	591	500	2000
(5.)	Chlorides		mg/l	425.6	143.52	250	1000
(6.)	Fluoride		mg/l	0.58	0.48	1	1.5
(7.)	Heavy Metals	Zinc	mg/l	0.1	0.1	0.01	0.01

14.3. No. of Surface Water monitoring locations : 08

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	COD		mg/l		12.4	9.4	D
(2.)	pH		NA		8.41	6.65	A
(3.)	BOD		mg/l		3.7	3	C
(4.)	DO		mg/l		6.1	5.2	B

14.4. No. of Ambient Noise monitoring locations : 08

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	65.3	50.5	75
(2.)	Leq(Night)	A-weighted decibels(dB(A))	60.0	42.1	70

14.5. No. of Soil Sample Monitored locations : 08

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	P(Phosphorus)	Milligram per Kilogram		47	37
(2.)	Electric Conductivity	Others	ÂµS/cm	330	192
(3.)	pH			7.24	6.93
(4.)	K(Potassium)	Milligram per		500	120

		Kilogram			
(5.)	N(Nitrogen)	Milligram per Kilogram		840.06	212.32

Details of Ground Water Table:

- (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 7
- 14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 7
- (c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. N o.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	GroundWater		96	0.15	Pipeline	Tube Well	Lr. No. 105 DD(G)/AG â€“VI/Fresh Noc/2018	07 May 2018	120

- 15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. N o.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
1	Sewage	8	10	STP	Green Belt Renewal Plant,Others	Loss	7	1
2	Effluent	11.5	20	ZLD	Reuse		11.5	

					within the Plant & Recycling, Green Belt Renewal Plant			
--	--	--	--	--	--	--	--	--

	(a)Total Waste Water Generation	19.5
16.1.	(b)Total Discharged Water	1
	(c)Total Reused Water	18.5

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Organic waste	Municipal Solid Waste	0.5832	Tons	5	Road	Others	Municipal bin including food waste
(2.)	Inorganic waste	Municipal Solid Waste	0.0648	Tons	12	Road	Treatment, Storage and Disposal Facility(TSDF)	
(3.)	Ash from wood	Fly Ash	0.192	Tons	6	Road	Others	Given to local farmer for agriculture purpose

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	NOx	Microgram per Meter Cube	33.6	0	0.5701	34.18	80
(2.)	PM10	Microgram per	71.2	0	0.4096	71.61	100

		Meter Cube					
(3.)	PM2.5	Microgra m per Meter Cube	35.7	0	0.4096	36.1 1	60
(4.)	SO2	Microgra m per Meter Cube	18.2	0	0.1964	18.4	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Emission (GLS)
(1.)	1x180 kVA DG	Diesel	7.5	0.3	PM10	2.77E-05
(2.)	1x4.65 MW/Hr TFH	Fire wood	30	0.5	PM10	0.194
(3.)	1.74 MW/Hr TFH	Fire wood	30	0.5	PM10	0.194
(4.)	1x380 kVA DG	Diesel	12	0.3	PM10	5.85E-05
(5.)	1x250 kVA DG	Diesel	12	0.3	PM10	3.85E-05

Power Requirement:

19. (a)Quantity (Kilo Volt Amps (kVA)) 360
(b)Source TANGEDCO
(c)Standby Arrangement (Details of DG Sets) 1 X 380 KVA and 1 X 180 KVA
(d)Stack Height (in m) 12

Land Ownership Pattern:

- (a)Forest Land 0
(b)Private Land 4.13949
20. (c)Government Land 0
(d)Revenue Land 0
(e)Other Land 0
Total Land 4.13949

Present Land Use Breakup of the Study Area in Ha:

21. (a)Agriculture Area 22285

(b)Waste/Barren Land	420			
(c)Grazing/ Community Land	0			
(d)Surface Water Bodies	7800			
(e)Settlements	1825			
(f)Industrial	0			
(g)Forest	0			
(h)Mangroves	0			
(i)Marine Area	0			
(j)Others : Mining	150			
Total	32480			

22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Others	Overall plant are	4.13949	Ha
Total			4.13949	

Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :

23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	WLS	Nil	0	Nil
(2.)	NPA	Nil	0	Nil
(3.)	ESAs	Nil	0	Nil
(4.)	ESZs	Nil	0	Nil
(5.)	Corridors	Nil	0	Nil
(6.)	Wildlife Corridors	Nil	0	Nil
(7.)	Critically Polluted Area	Nil	0	Nil

23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental	Other Details of	Name	Distance from the Project (Km)	Remarks

	Sensitivity	Environmental Sensitivity			
(1.)	Archaeological Sites		Nil	0	Nil
(2.)	Forest		Nil	0	Nil
(3.)	Defence Installations		Nil	0	Nil
23.3.	<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p> <p><u>Land Acquisition Status:</u></p> <p>(a)Acquired Land(Ha) 0</p> <p>26. (b)Land yet to be acquired(Ha) 0</p> <p>(c)Status of Land acquisition if not acquired 0</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>(a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced Families) 0</p> <p>27. (d)No. of PAFs (Project Affected Families) 0</p> <p>(e)Funds Allocated for R&R(in Rs) 0</p> <p>(f)Status of R&R NA</p> <p><u>Details of Presence of Schedule-I Species:</u></p> <p>(a)Whether there is Presence of Schedule-I Species ? No</p> <p>28. (b)Whether conservation plan for Schedule-I Species has been prepared ? No</p> <p>(c)Whether conservation plan for No</p>				

Schedule-I Species has been approved by competent authority ?

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? No
29. (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer Area Tamarai Tangal
- (ii)Direction of Water Bodies in Buffer Area West
- (iii)Distance of Water Bodies in Buffer Area 0.02

Manpower Requirement:

- (a)Permanent Employment-During Construction 0
- (b)Permanent Employment-During Operation 140
31. (c)Temporary Employment- During Construction 20
- (d)Temporary Employment- During Operation 0
- (e)No. of working days 300
- (f)Total Manpower 160

Green Belt in Ha:

- (a)Total Area of Green Belt 1.37
32. (b)Percentage of Total Project Area 33.10
- (c)No. of Plants to be Planted 2055
- (d)Funds Allocated for Plantation 3000000

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits	
NIL			

34. **CRZ Specific Details : Not Applicable**

35. Sector Specific Details : NOT APPLICABLE**Details of Court Cases:**

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA 0083
- (ii) Name of the EIA Consultant HUBERT ENVIRO CARE SYSTEMS (P) LTD, CHENNAI
- (iii) Address Hubert Enviro Care Systems (P) Ltd. A-21, (Behind Lions Club School) III Phase, Thiru Vi Ka Industrial Estate. Guindy, Chennai - 600 032.
- (iv) Category of Accreditation A
- (v) Sector of Accreditation Industrial Projects - 2
- (vi) Validity of Accreditation 13 Oct 2019

13.3.5.2 The EAC, after presentation by the PP, noted the following

- Standard Terms of Reference for the project was issued on 10th May, 2019. Public hearing for the project has been conducted by the State Pollution Control Board on 16th July, 2019. The main issues ^{raised} during the public hearing are related to greenbelt with medicinal plants, rainwater harvesting and employment to local public, etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors, rivers etc. within 10 km from the project site.
- Total water requirement is estimated to be 96 cum/day, which includes fresh water requirement of 77.5 cum/day proposed to be met from ground water through borewell. Permission for extraction of ground water has been obtained from Water Resources department vide letter dated 7th May, 2018.
- Effluent of 11.5 cum/day shall be treated in ETP and treated water shall be reused for plant requirement. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The expenditure towards CER for the project would be Rs. 20 lakhs as committed by the project proponent.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental

components. Issues raised during the public hearing have been properly addressed by the project proponent.

13.3.5.3 The EAC, after deliberations, -----:-

The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

A. Specific Conditions:-

- i. *Fugitive emissions shall be controlled at 99.95% with effective chillers*
- ii. *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used*
- iii. *Solvent management shall be carried out as follows:*
 - a. *Reactor shall be connected to chilled brine condenser system.*
 - b. *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - c. *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - d. *Solvents shall be stored in a separate space specified with all safety measures.*
 - e. *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - f. *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - g. *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- iv. *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented*

B. General Conditions:-

I. Statutory compliance

- i. *The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- ii. *The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- iii. *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989*

II. Air quality monitoring and preservation

- i. *The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.*
- ii. *The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.*
- iii. *The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.*

- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Total fresh water requirement shall not exceed 77.5 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Fly ash, if any, should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided
- ii. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- iii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iv. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.

- d. Use of Close Feed system into batch reactors.
- e. Venting equipment through vapour recovery system.
- f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- i. The green belt of at least 4-5m width (two rows) shall be developed in nearly 35% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least Rs. 20 lakhs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

- which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
 - v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
 - xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
 - xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010

Agenda No.13.3.6

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/3 block in Jalore District, Rajasthan and Banaskantha District, Gujarat by M/s Vedanta Limited (Division Cairn Oil & Gas) - Environmental Clearance

[IA/RJ/IND2/99919/2019, IA-J-11011/102/2019-IA-II(I)]

13.3.6.1 The proposal is for environmental clearance for the proposed Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/3 block in Jalore District, Rajasthan and Banaskantha District, Gujarat by M/s Vedanta Limited (Division Cairn Oil & Gas). The project/activity covered under item 1(d) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/3 Block, Jalore District, Rajasthan
1.	(b)Name of the Company / Organisation	M/s Vedanta Limited(Division Cairn Oil & Gas)
	(c)Registered Address	4th Floor, Vipul Plaza, Suncity Sector 54, Gurgaon, Haryana - 122002,Gurgaon,Haryana-122002
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Dilip Kumar Bera
2.	(b)Designation (Owner/ Partner/ CEO)	Sr. Manager - Environment
	(c)Address	NIL
	(d)Pin code	122002
	(e)E-mail	dilipkumar.bera@cairnindia.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	1(b) Offshore and onshore oil and gas exploration, development & production
	(b)Category	A
3.	(c)Proposal Number	IA/RJ/IND2/99919/2019
	(d)Master Proposal Number(Single Window)	SW/115969/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Fresh EC
4.	<u>Location of the Project:</u>	

(a)Plot/Survey/Khasra No.	45 C/4, 45 D/1, 40 P/14, 40 P/13, 40 O/16
(b)Pincode	343001
(c)Bounded Latitudes (North)	FROM 2731358.53 To 2786513.38
(d)Bounded Longitudes (East)	FROM 196368.21 To 790641.46
(e)Survey of India Topo Sheet No.	45 C/4, 45 D/1, 40P/14, 40 P/13, 40)/16
5. (a)Number of States in which Project will be Executed	1
(b)Main State of the project	Rajasthan

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Rajasthan	Jalore	Bhinmal	Meerpura
(2.)	Rajasthan	Jalore	Bagora	Jeran
(3.)	Rajasthan	Jalore	Sanchoore	Kura
(4.)	Rajasthan	Jalore	Raniwara	Kotra

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/102/2019-IA-II(I)
6. (b)Date of Apply of TOR 20 Mar 2019
- (c)Date of Issue of TOR / Standard ToR 25 Apr 2019

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
7. (b)Whether details of Public Hearing available? Yes
- (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing							
S. N o.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of 27		Collectorate	Stat Rajast	54	CSR Implement	Additional

Advertise Jun ment : 20 19	Date : 29 Jul 20 19	Meeting Hall Jalore	e : han District : Jalore Tehsil : Jalor Village : Jalore	ation, Employment Generation, Noise Pollution, Land Requirement	District Magistrate Jalore
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8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Well Pad	90 days	For exploitation of hydrocarbons.

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Crude Oil	32000	Others	BOPD	Others	Oil Tanker
(2.)	Natural Gas	4.8	Others	MMFCSD	Others	Used as fuel in GEG and flaring

9. In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

Details Not Applicable

Project Cost:

10. (a) Total Cost of the Project at current price level (in Crores) 2142
(b) Funds Allocated for Environment Management (Capital) 0.08 (in Crores)

	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	0								
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	0.08								
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification?	No								
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification?	No								
<u>Raw Material / Fuel Requirement:</u>										
13.	(a) Proposed quantity of raw material/fuel	0								
	(b) Existing quantity of raw material/fuel	N/A								
	(c) Total quantity of raw material/fuel	0								
13.1. Raw Material / Fuel Profile										
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site	Type of Linkage	Other Type of Linkage
(1.)	Water	102	Cubic Meter per Day		Tanker Supply	Road		0	Others	Approved Supplier
<u>Baseline Data :</u>										
14.	(a) Period of Base Line Data Collection					FROM 10 Mar 2019 To 31 May 2019				
	(b) Season					Summer				
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 15										
S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard				
(1.)	SO2	Micro Gram per	19.80	5.3	18.61	80				

		Meter Cube				
(2.)	NOx	Micro Gram per Meter Cube	44.9	21.1	44.5	80
(3.)	CO	Mili Gram per Meter Cube	1.98	0.33	1.75	4
(4.)	PM10	Micro Gram per Meter Cube	94.32	41.78	92.68	100
(5.)	PM2.5	Micro Gram per Meter Cube	36	10	32.62	60

14.2. No. of Ground Water monitoring locations : 15

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TSS			mg/l		0	0	0	0
(2.)	Fluoride			mg/l		1.18	0.05	1	1.5
(3.)	TDS			mg/l		4524	1002	500	2000
(4.)	pH			NA		7.6	7.2	6.5	8.5
(5.)	Total Hardness			mg/l		810	120	300	600
(6.)	Heavy Metals		Arsenic	mg/l		0.001	0.001	0.01	0.05
(7.)	Chlorides			mg/l		1728	32	250	1000

14.3. No. of Surface Water monitoring locations : 0

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	pH		NA		0	0	C
(2.)	DO		mg/l		0	0	C
(3.)	BOD		mg/l		0	0	C
(4.)	COD		mg/l		0	0	C

14.4. No. of Ambient Noise monitoring locations : 15

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard							
(1.)	Leq(Night)	A-weighted decibels(dB(A))	61.8	42.4	55							
(2.)	Leq(Day)	A-weighted decibels(dB(A))	62	56.2	65							
14.5. No. of Soil Sample Monitored locations : 15												
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value							
(1.)	P(Phosphorus)	Kilogram per hectare		14.50	3.97							
(2.)	N(Nitrogen)	Percent		1.49	0.62							
(3.)	pH			8.8	6.7							
(4.)	K(Potassium)	Kilogram per hectare		525.22	323.3							
(5.)	Electric Conductivity	Others	ÂµS/cm	627.7	70.9							
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 20 To 40</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 20 To 40</p> <p>(c)Whether Ground Water Intersection will be there ? No</p>												
15. Details of Water Requirement (During Operation)												
S. No.	Source	Source Other	Required Quantity	Distance from Source	Copy of Permission from Competent Authority	Mode of Transport	Other Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
1	Ground Water		102	0	Not Applicable	mode Others	Road	Others	Tanker Supply	Not Applicable	26 Aug 2019	102

15.1.	(a)Whether Desalination is proposed		No					
16. Waste Water Management(During Operation)								
S. No	Type/Sou rce	Quantit y of Waste Water Generat ed (KLD)	Treatm ent Capacit y (KLD)	Treatm ent Method	Mode of Dispos al	Other Mode of Dispos al	Quantity of Treated Water Used in Recycling/R reuse (KLD)	Quantity of Dischar ged Water (KLD)
1	Effluent From Drill Site	40	50	Mobile ETP	Others	Dischar ge as per CPCB Standa rds	10	30
2	Domestic Waste water Generation	25	30	Mobile STP	Reuse within the Plant & Recycling, Green Belt Renew al Plant		25	
(a)Total Waste Water Generation 65								
16.1.	(b)Total Discharged Water		30					
	(c)Total Reused Water		35					
17. Solid Waste Generation/Management								
S. No .	Name of Waste	Item	Quantit y per Annum	Unit	Distanc e from Site(KM)	Mode of Transport	Mode of Dispos al	Other Mode of Dispos al
(1.)	Domesti c Waste	Municipa l Solid Waste	0.03	Ton s	0	Road	Others	Compost Pit
(2.)	Drill Cuttings with WBM	Industrial Waste	750	Ton s	0	Road	Others	HDPE Lined Pit
(3.)	Drill Cutting	Industrial Waste	1500	Ton s	0	Road	Others	As per Hazardou

	with SBM								s Waste Rule 2016
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18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10	Microgram per Meter Cube	94.32	5	0.48	95	100
(2.)	PM2.5	Microgram per Meter Cube	36	5	0	36.1	60
(3.)	SO2	Microgram per Meter Cube	19.03	5	0.06	20	80
(4.)	NOx	Microgram per Meter Cube	44.9	5	20	65	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	DG	HSD	7	0.2	NOx		0.714
(2.)	DG	HSD	30	0.305	NOx		2.04
(3.)	GEG	Gas	30	0.3	NOx		0.093
(4.)	Flareing	Gas	30	0.078	NOx		0.023
(5.)	DG	HSD	7	0.2	NOx		0.51

Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA)) 2450

(b)Source DG

19. (c)Uploaded Copy of Agreement Copy of Agreement

(d)Standby Arrangement (Details of DG Sets) 1 x 350 KVA DG Sets (camp site) 2 x 1000 KVA DG Se

(e)Stack Height (in m) 30

<u>Land Ownership Pattern:</u>				
	(a)Forest Land		0	
	(b)Private Land		702	
20.	(c)Government Land		0	
	(d)Revenue Land		0	
	(e)Other Land		0	
	Total Land		702	
<u>Present Land Use Breakup of the Study Area in Ha:</u>				
	(a)Agriculture Area		121270	
	(b)Waste/Barren Land		4800	
	(c)Grazing/ Community Land		0	
	(d)Surface Water Bodies		4588	
21.	(e)Settlements		0	
	(f)Industrial		0	
	(g)Forest		4020	
	(h)Mangroves		0	
	(i)Marine Area		0	
	(j)Others : Fallow Land		7302	
	Total		141980	
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Others	Well Pad	9	Well Pad with EPU
Total			9	
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Critically Polluted Area	NA	0	Not Present
(2.)	Corridors	NA	0	Not Present
(3.)	Wildlife Corridors	NA	0	Not Present

(4.)	WLS	NA	0	Not Present	
(5.)	NPA	NA	0	Not Present	
(6.)	ESAs	NA	0	Not Present	
(7.)	ESZs	NA	0	Not Present	

23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		Reserve Forest	0	Within Block
(2.)	Archaeological Sites		NA	0	Not Present
(3.)	Defence Installations		NA	0	Not Present

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) Not Applicable

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired Will decided in later stage

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

	(d)No. of PAFs (Project Affected Families)	0
	(e)Funds Allocated for R&R(in Rs)	0
	(f)Status of R&R	Yet To Start
	<u>Details of Presence of Schedule-I Species:</u>	
	(a)Whether there is Presence of Schedule-I Species?	Yes
28.	(i)Details of Schedule-I Species	Seven schedule I species has been recorded but only 1 Schedule I species has been spotted during faunal sampling, Indian Gazelle (Gazella bennettii) and ten avian schedule I species has been recorded
	(b)Whether conservation plan for Schedule-I Species has been prepared?	No
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	No
	<u>Details of Presence of Water Bodies in Core Area:</u>	
	(a)Whether there is Presence of Water Bodies in Core Area ?	Yes
29.	(i)Details of Water Bodies in Core Area	Sukri River, Sagi River
	(b)Whether there is Diversion Required ?	No
	(c)Whether permission has been obtained from competent authority ?	No
	<u>Details of Presence of Water Bodies in Buffer Area:</u>	
30.	(a)Whether there is Presence of Water Bodies in Buffer Area ?	No
	<u>Manpower Requirement:</u>	
	(a)Permanent Employment-During Construction	0
	(b)Permanent Employment-During Operation	0
31.	(c)Temporary Employment- During Construction	0
	(d)Temporary Employment- During Operation	80
	(e)No. of working days	90
	(f)Total Manpower	80

<u>Green Belt in Ha:</u> (a)Total Area of Green Belt 0 32. (b)Percentage of Total Project Area 0.00 (c)No. of Plants to be Planted 0 (d)Funds Allocated for Plantation 0		
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Financial	Revenue will be generated for both State and country during production phase
(2.)	Social	Community will be benefited through induced socio-economic development, employment generation and CSR activity.
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<u>Details of Court Cases:</u> 36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No		
<u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u> 37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act? No		
<u>Details of EIA Consultant:</u> 38. (a)Have you hired Consultant for preparing document? Yes (i)Accreditation No. NABET/EIA/1821/RA0108 (ii)Name of the EIA Consultant AECOM India Private Limited (iii)Address AECOM India Private Limited 19th Floor, Building No.5 Tower C, Cyber City Gurgaon 122002 Haryana, India (iv)Mobile No. 9819068877 (v)Landline No. 8240771980 (vi)Email Id chetan.zaveri@aecom.com (vii)Category of Accreditation A (viii)Sector of Accreditation Industrial Projects - 2 (ix)Validity of Accreditation 13 Jan 2021		

13.3.6.2 The EAC, after presentation, noted the following:-

- Standard Terms of Reference for the project was issued on 25th April 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 29th July 2019. The main issues raised during the public hearing are related to CSR implementation, Employment Generation, Noise pollution, Land Requirement.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Seasonal rivers Sagi and Sukri are flowing through the block area.
- Total water requirement is estimated to be 102 cum/day/well drilling. During early production, water requirement will be 18 cum/day for each early production unit, proposed to be met from ground water/approved sources. It was desired that the fresh water requirement shall be restricted to 30 cum/day/well. Effluent of 65 cum/day shall be treated in ETP/STP. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been properly addressed by the project proponent.

13.3.6.3 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

A. Specific Conditions:

- i. Felling of tree shall not be permitted unless PP takes applicable permission from State Forest Department/concerned authority, if felling of tree is inevitable for drilling operations.
- ii. During exploration, production, storage and handling, the fugitive emissions of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- iii. The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- iv. Approach road shall be made pucca to minimize generation of suspended dust.
- v. All the commitments made to the public during public consultation/hearing shall be implemented in totality.

B. General Conditions:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- iii. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- iv. The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2019, as applicable

II. Air quality monitoring and preservation

- i. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

- ii. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM10, PM2.5, SO2, NOX, CO, CH4, HC, Non-methane HC etc.
- v. During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- vi. The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.
- vii. Approach road shall be made pucca to minimize generation of suspended dust

III. Water quality monitoring and preservation

- i. Waste water shall be treated by an effective onsite ETP coupled with RO so as to reduce fresh water foot print on daily basis. Size of the waste pit shall be kept minimum in such way so that it can only accommodate volume of discarded mud and volume of drill cuttings. Storm water shall not be allowed to reach waste water pit. Waste water, if taken outside for treatment, as proposed to Barmer facility, shall be undertaken with prior permission from SPCB
- ii. Total fresh water requirement shall not exceed 30 cum/day/well proposed to be met through tankers/ground water. Mobile ETP shall be installed coupled with RO to reuse the treated water in drilling system. Size of the waste shall not exceed from the hole volume of the well + volume of drill cutting expected to be generated and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iv. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- v. Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

IV. Noise monitoring and prevention

- i. The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

- iii. *The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).*

V. Energy Conservation measures

- i. *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- i. *Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.*
- ii. *Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office*

VII. Safety, Public hearing and Human health issues

- i. *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- ii. *Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.*
- iii. *Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.*
- iv. *On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority*
- v. *The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations*
- vi. *The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.*
- vii. *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- viii. *The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus*
- ix. *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*
- x. *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- xi. *The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.*

VIII. Corporate Environment Responsibility

- i. At least 2.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office
- v. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- vi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No.13.3.7

Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at Sy.No. 7/2, 7/3, 7/4, 138/3, 139, 216, 217, 218, 219/1 (PART), 219/2(PART), 221 (PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s Nifty Labs Pvt Ltd Unit II- Environmental Clearance.

[IA/AP/IND2/73247/2018, IA-J-11011/76/2018-IA-II(I)]

13.3.7.1 The proposal is for environmental clearance for the proposed establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at Sy.No. 7/2, 7/3, 7/4, 138/3, 139, 216, 217, 218, 219/1 (PART), 219/2(PART), 221 (PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s Nifty Labs Pvt Ltd Unit II. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 in Category "A". Salient features of the project reported by project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit by Nifty Labs Pvt. Ltd. Unit II
	(b)Name of the Company / Organisation	M/S. NIFTY LABS PRIVATE LIMITED & " UNIT-II
	(c)Registered Address	Ramannapalem village, Kakarla Gramapanchayati,Tiruvuru Mandal, Krishna dist,

(d)Legal Status of the Company A.P,
Private
(e)Joint Venture No

Address for the correspondence:

(a)Name of the Applicant D Kesava Reddy
(b)Designation (Owner/ Partner/ CEO) Managing Director
2. (c)Address Flat No.203,Satya sai residency,Plot No.7-1-54/1,Beside MCH Park,Dharm karan road, Ameerpet, Hyderabad, Ameerpet, Hyderabad, Telangana - 500016
(d)Pin code 500016
(e)E-mail desiredreddy@niftylabs.com

Category of the Project/Activity as per Schedule of EIA Notification,2006:

(a)Project/Activity **5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk**
(b)Category **A**
3. (c)Proposal Number **IA/AP/IND2/73247/2018**
(d)Master Proposal Number(Single Window) **SW/117635/2019**
(e)EAC concerned (for category A Projects only) **Industrial Projects - 2**
(f)Project Type **New project**

Location of the Project:

(a)Plot/Survey/Khasra No. Sy. Nos. 7/2, 7/3, 7/4, 138/3, 139, 216, 217, 218,
(b)Pincode 521227
4. (c)Bounded Latitudes (North) FROM 17.032432 To 17.033723
(d)Bounded Longitudes (East) FROM 80.372307 To 80.373798
(e)Survey of India Topo Sheet No. E44O12 E44U9 (65C12 65D9)
5. (a)Number of States in which Project will be Executed 1
(b)Main State of the project Andhra Pradesh

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Andhra Pradesh	Krishna	Tiruvuru	Ramannapalem

6. **Details of Terms of Reference (ToR):**

(a) MoEF&CC / SEIAA File Number IA-J-11011/76/2018-IA-II(I)
 (b) Date of Apply of TOR 28 Feb 2018
 (c) Date of Issue of TOR / Standard ToR 05 Apr 2018

Details of Public Consultation:

- (a) Whether the Project Exempted from Public Hearing? No
 (b) Whether details of Public Hearing available? Yes
 (c) Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. l.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 13 May 2019	Date : 12 Jun 2019 Distance of Public Hearing Venue from the Proposed Project : 0	At Proposed Project Site	State : Andhra Pradesh District : Krishna Tehsil : Tiruvuru Village : Ramannapalem	150	Employment Generation 2. Village Development 3. Pollution Control Measures	Collector & District Magistrate

8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Bulk Drug and Intermediates	360 TPM	Campaign base products

	Manufacturing Unit					
8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport of Product	
(1.)	Bulk Drug and Intermediates	360	Others	TPM	Road	
9.	<u>In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):</u> Details Not Applicable					
	<u>Project Cost:</u>					
	(a) Total Cost of the Project at current price level (in Crores)	72				
	(b) Funds Allocated for Environment Management (Capital) (in Crores)	18.43				
10.	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	1.44				
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	25.97				
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification?	Yes				
	d) Inter-State boundaries and international boundaries	Yes				
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No				
	<u>Raw Material / Fuel Requirement:</u>					
13.	(a) Proposed quantity of raw material/fuel	450				
	(b) Existing quantity of raw material/fuel	N/A				
	(c) Total quantity of raw material/fuel	450				
13.1. Raw Material / Fuel Profile						

S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site	Type of Linkage
(1.)	Synthetic Organic Chemicals	5400	Tons per Annum	Indigenous	Road	120	Open Market

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Mar 2018 To 31 May 2018
 (b) Season Summer

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	49	36	49	100
(2.)	PM2.5	Micro Gram per Meter Cube	28	18	28	60
(3.)	SO2	Micro Gram per Meter Cube	14	10	14	80
(4.)	NOx	Micro Gram per Meter Cube	15	10	15	80

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TSS			mg/l		18	11	100	100
(2.)	Fluoride			mg/l		0.36	0.24	1	1
(3.)	Chlorides			mg/l		479	71	250	250
(4.)	pH			NA		7.55	7.1	7	7
(5.)	TDS			mg/l		1129	475	500	500

(6.)	Total Hardness			mg/l		675	245	200	200
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14.3. No. of Surface Water monitoring locations : 3

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	BOD		mg/l		1.4	1	B
(2.)	pH		NA		8.31	7.77	B
(3.)	DO		mg/l		6.5	5.3	B
(4.)	COD		mg/l		9.6	7.4	B

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	49	42	55
(2.)	Leq(Night)	A-weighted decibels(dB(A))	42	38	45

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
1	Electric Conductivity	Others	dS/m	1.056	0.094
2	N(Nitrogen)	Percent		0.082	0.02
3	P(Phosphorus)	Milligram per Kilogram		340	160
4	pH			7.37	6.02
5	K(Potassium)	Milligram per Kilogram		477	185

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 100 To 70

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 30 To 40

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)								
S. No.	Source	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	GroundWater	737.3	0.1	Pipeline	Tube Well	1588/Hg-II/2018	29 Oct 2018	805
15.1. (a)Whether Desalination is proposed No								
16. Waste Water Management(During Operation)								
S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)	
1	Low TDS and Low COD Stream	129	550	Sent to biological treatment system followed by RO. RO permeate reused for cooling towers makeup and scrubbers. RO rejects are sent to MEE.	Reuse within the Plant & Recycling	129		
2	High TDS and High COD Stream	336.9	450	Effluent is stripped in a steam stripper to remove organics and then concentrated in	Reuse within the Plant & Recycling	336.9		

				multiple effect evaporators (MEE) followed by drying in agitated thin film dryer (ATFD). Stripper condensate will be sent to cement plants for Co-Incineration. Salt from ATFD is sent to TSDF. Distillate from MEE and ATFD is sent for further treatment in biological treatment plant			
3	Domestic Wastewater	30	40	Sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt.	Green Belt Renewal Plant	30	
16.1. (a)Total Waste Water Generation 495.9 (b)Total Discharged Water 0 (c)Total Reused Water 495.9							

17. Solid Waste Generation/Management								
S. N o.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site (Km)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
1	Organic Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	8631.36	Tons	100	Road	Others	Sent to Cement plants for co-processing or TSDF
2	Inorganic Salts/Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	6814.8	Tons	250	Road	Treatment, Storage and Disposal Facility(TSDF)	
3	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	408	Tons	250	Road	Treatment, Storage and Disposal Facility(TSDF)	
4	Boiler Ash	Bottom Ash	9360	Tons	60	Road	Others	Sent to Brick Manufacturers
5	Spent Mixed Solvents	Industrial Waste	9288	Kilolitre	140	Road	Others	Sent to authorized recovery units
18.								

18.1. Air Quality Impact Prediction							
S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	SO ₂	Microgram per Meter Cube	14	1.7	11.3	25.36	80
(2.)	PM _{2.5}	Microgram per Meter Cube	25	1.7	0.8	25.83	60
(3.)	NO _x	Microgram per Meter Cube	15	1.7	13.2	28.22	80
(4.)	PM ₁₀	Microgram per Meter Cube	46	1.7	1.8	47.88	100

18.2. Stack Details							
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	20 TPH Boiler	Coal	40	1.8	PM ₁₀		1.8 g/s
(2.)	20 TPH Boiler	Coal	40	1.8	SO ₂		3.2 g/s
(3.)	12 TPH Boiler	Coal	40	1.3	NO _x		1.75 g/s
(4.)	20 TPH Boiler	Coal	40	1.8	NO _x		4.6 g/s
(5.)	12 TPH Boiler	Coal	40	1.3	PM ₁₀		0.8 g/s
(6.)	12 TPH Boiler	Coal	40	1.3	SO ₂		0.95 g/s
(7.)	4 x 2 Lac K.Cal Thermic Fluid Heater	Coal	30	0.5	PM ₁₀		0.06 g/s
(8.)	4 x 2 Lac	Coal	30	0.5	SO ₂		0.08 g/s

	K.Cal Thermic Fluid Heater						
(9.)	4 x 2 Lac K.Cal Thermic Fluid Heater	Coal	30	0.5	NOx		0.12 g/s

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 9890
 (b)Source AP TRANSCO
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) 6 x 1010 kVA and 3 x 500 kVA
 (e)Stack Height (in m) 10

Land Ownership Pattern:

- (a)Forest Land 0
 (b)Private Land 20.234
 20. (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 0
Total Land 20.234

Present Land Use Breakup of the Study Area in Ha:

- (a)Agriculture Area 0
 (b)Waste/Barren Land 0
 (c)Grazing/ Community Land 0
 (d)Surface Water Bodies 0
 21. (e)Settlements 0
 (f)Industrial 20.234
 (g)Forest 0
 (h)Mangroves 0
 (i)Marine Area 0
 (j)Others : 0
Total 20.234

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Green belt		7.025	

(2.)	Others	Roads	4.046		
(3.)	Area for Solid Waste Management		0.485		
(4.)	Safety Zone		2.59		
(5.)	Main Plant		6.088		
Total		20.234			
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	WLS	Not Applicable	0	No WLS within 10 km of Study Area	
(2.)	Corridors	Not Applicable	0	No Corridors within 10 km Study Area	
(3.)	Critically Polluted Area	Not Applicable	0	No Critically Polluted Area within 10 km of Study Area	
(4.)	ESAs	Not Applicable	0	No ESAs within 10 km Study Area	
(5.)	ESZs	Not Applicable	0	No ESZs within 10 km Study Area	
(6.)	Wildlife Corridors	Not Applicable	0	No Wildlife Corridors within 10 km Study Area	
(7.)	NPA	Not Applicable	0	No NPA within 10 km of Study Area	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		Kakarla RF	0.05	West Direction
(2.)	Archaeological Sites		Not Applicable	0	No Archaeological Sites within 10 km Study Area

(3.)	Defence Installations		Not Applicable	0	No Defence Installations within 10 km Study Area
(4.)	Others	Reserve Forest	Atlapragada and Koduru RF	7.5	South Direction
23.3.	<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) Not Applicable</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p><u>Land Acquisition Status:</u></p> <p>26. (a)Acquired Land(Ha) 20.234</p> <p>(b)Land yet to be acquired(Ha) 0</p> <p>(c)Status of Land acquisition if not acquired Completed</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>27. (a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced Families) 0</p> <p>(d)No. of PAFs (Project Affected Families) 0</p> <p>(e)Funds Allocated for R&R(in Rs) 0</p> <p>(f)Status of R&R NA</p> <p><u>Details of Presence of Schedule-I Species:</u></p> <p>28. (a)Whether there is Presence of Schedule-I Species ? No</p> <p>(b)Whether conservation plan for Schedule-I Species has been prepared ? No</p> <p>(c)Whether conservation plan for</p>				

Schedule-I Species has been approved by competent authority ?

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area? No
29. (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer Area Edullavagu Steam
- (ii)Direction of Water Bodies in Buffer Area South East
- (iii)Distance of Water Bodies in Buffer Area 2

Manpower Requirement:

- (a)Permanent Employment-During Construction 50
- (b)Permanent Employment-During Operation 700
31. (c)Temporary Employment- During Construction 200
- (d)Temporary Employment- During Operation 100
- (e)No. of working days 30
- (f)Total Manpower 1050

Green Belt in Ha:

- (a)Total Area of Green Belt 7.025
32. (b)Percentage of Total Project Area 34.72
- (c)No. of Plants to be Planted 14000
- (d)Funds Allocated for Plantation 800000

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment Potential
(2.)	Financial	Reduce Imports of API Intermediates

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA0077
- (ii) Name of the EIA Consultant Team Labs and Consultants
- (iii) Address TEAM Labs and Consultants B-115-117 & 509, Annapurna Block, Aditya Enclave, Ameerpet, Hyderabad-500 038
- (iv) Mobile No. 0402374855
- (v) Landline No. 0402374855
- (vi) Email Id teamlabs@gmail.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 01 Dec 2019

13.3.7.2 The EAC, after presentation by PP, noted the following:-

- Standard Terms of Reference for the project was issued on 5th April, 2018. Public hearing for the project has been conducted by the Andhra Pradesh Pollution Control Board on 12th June, 2018. The main issues raised during public hearing are related to employment, pollution control measures, ground water contamination, rain water harvesting, safety measures, plantation, village development, etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Kakarla (0.05 km), Atlapragada and Konduru reserve forests (7.5 km) are located within 10 km from the project site. Edullavagu stream is flowing at a distance of 2 km in southeast direction and Kattaleru stream is at a distance of 3.7 km in northwest direction.

- The total water requirement is estimated to be 1209.3 cum/day, which includes fresh water requirement of 737.3 cum/day, proposed to be met from ground water. Necessary permission in this regard has been obtained from the State Ground water department.
- Out of total effluent of 495.9 cum/day, high COD/TDS stream of 336.9 cum/day shall be sent to stripper followed by multiple effect evaporators (MEE), and agitated thin film dryer (ATFD). The condensate from stripper shall be sent to cement plants for co-incineration, while condensate from MEE and ATFD shall be mixed with low TDS/COD from utility blow downs. Wastewater from R&D of 129 cum/day shall be treated in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers make-up and scrubbers. Domestic wastewater of 30 KLD shall be sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt.

13.3.7.3 *The EAC, after deliberations, asked for clarification/inputs in respect of the following:-*

- *Detailed effluent treatment plan with Zero Liquid Discharge system.*
- *Plan for rain water harvesting system and revised water balance.*
- *Speaker wise and Point-wise issues raised during public consultation/hearing and response of PP, along with detailed time bound action plan and budgetary provisions shall be submitted.*
- *Plan for emission control at 99.95% efficiency.*
- *Occupational health and management plan.*
- *CER plan with activities proposed based on public consultation/hearing issues; and need based assessment.*

The proposal was therefore deferred for the needful.

Agenda No.13.3.8

Offshore Oil & Gas Drilling/ Development and Production from 8 wells in Western Offshore Block MB/OSDF/B80/2016 of Heera Panna Basin in Arabian Sea in Maharashtra by M/s Hindustan Oil Exploration Company Limited - Environmental Clearance

[IA/MH/IND2/95746/2017, IA/MH/IND2/70980/2017]

13.3.8.1 The proposal is for environmental clearance for the Offshore Oil & Gas Drilling/ Development and Production from 8 wells in Western Offshore Block MB/OSDF/B80/2016 of Heera Panna Basin in Arabian Sea in Maharashtra by M/s Hindustan Oil Exploration Company Limited. The project activity covered under item 1(d) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a) Name of the project(s)	Offshore Oil & Gas Drilling/ Development and Production from 8 wells in Western Offshore Block MB/OSDF/B80/2016 of Heera Panna Basin in Arabian Sea

(b)Name of the Company / Organisation Hindustan Oil Exploration Company Ltd

(c)Registered Address "HOEC House" Tandaljia Road, Vadodara - 390020, Gujarat,Chennai,Tamil Nadu-600018

(d)Legal Status of the Company Joint Venture(Pvt+Govt.)

(e)Joint Venture Yes

Address for the correspondence:

(a)Name of the Applicant

(b)Designation (Owner/ Partner/ CEO) Head - HSE

2. (c)Address NIL

(d)Pin code 600018

(e)E-mail gjanakiraman@hoec.com

Category of the Project/Activity as per Schedule of EIA Notification,2006:

(a)Project/Activity **1(b) Offshore and onshore oil and gas exploration, development & production**

(b)Category **A**

3. (c)Proposal Number **IA/MH/IND2/95746/2017**

(d)Master Proposal Number(Single Window) **SW/95743/2019**

(e)EAC concerned (for category A Projects only) **Industrial Projects - 2**

(f)Project Type **Fresh EC**

Location of the Project:

(a)Plot/Survey/Khasra No. NA

(b)Pincode 400053

(c)Bounded Latitudes (North) FROM 185900 To 190300

4. (d)Bounded Longitudes (East) FROM 714300 To 714719

(e)Survey of India Topo Sheet No. NA

(g)Maximum Elevation Above Means Sea Level(AMSL) 0

(a)Number of States in which Project will be Executed 1

5. (b)Main State of the project Maharashtra

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Maharashtra	Mumbai City	Mumbai	B-80 Field Arabian

				Sea
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Details of Terms of Reference (ToR):

(a) MoEF&CC / SEIAA File Number IA/MH/IND2/70980/2017

6. (b) Date of Apply of TOR 17 Nov 2017

(c) Date of Issue of TOR / Standard ToR 01 Feb 2018

Details of Public Consultation:

(a) Whether the Project Exempted from Public Hearing? Yes

(b) Reason Public consultation is exempted as the proposed activities would be taken up offshore

8. **Details of Project Configuration/Product:**

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	MOPU	MOPU for well fluid processing	
(2.)	Development wells	8 development wells	
(3.)	Pipeline	11.5 km Oil and 1.35 km gas pipeline	

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	
(1.)	Oil & Gas production	15000	Others	blpd	Pipe Conveyor	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):**

Details Not Applicable

Project Cost:

10. (a) Total Cost of the Project at current price level (in Crores) 228

(b) Funds Allocated for Environment Management (Capital) 0 (in Crores)

	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	0					
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	22.94					
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No					
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No					
<u>Raw Material / Fuel Requirement:</u>							
13.	(a) Proposed quantity of raw material/fuel	9					
	(b) Existing quantity of raw material/fuel	N/A					
	(c) Total quantity of raw material/fuel	9					
13.1. Raw Material / Fuel Profile							
S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site	Type of Linkage
(1.)	High Speed Diesel	9	Kilo Litre per Day	Local	Pipe Conveyor	110	Open Market
<u>Baseline Data :</u>							
14.	(a) Period of Base Line Data Collection	FROM 02 Oct 2018 To 30 Dec 2018					
	(b) Season	Post-Monsoon					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 0							
S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard	
(1.)	SO2	Micro Gram per Meter Cube	0	0	0	80	

(2.)	NOx	Micro Gram per Meter Cube	0	0	0	80
(3.)	PM10	Micro Gram per Meter Cube	0	0	0	100
(4.)	PM2.5	Micro Gram per Meter Cube	0	0	0	60

14.2. No. of Ground Water monitoring locations : 0

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TSS			NA		0	0	0	0
(2.)	TDS			mg/l		0	0	500	2000
(3.)	Chlorides			mg/l		0	0	250	1000
(4.)	Fluoride			mg/l		0	0	1	1.5
(5.)	Others	Total coliform		Others	MPN/100 ml	0	0	9	0
(6.)	Total Hardness			mg/l		0	0	300	600
(7.)	Heavy Metals		cadmium	mg/l		0	0	0.003	0.003
(8.)	pH			Others	NA	0	0	8.5	8.5

14.3. No. of Surface Water monitoring locations : 3

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	pH		NA		7.8	7.4	B
(2.)	DO		mg/l		5.73	4.12	B
(3.)	BOD		mg/l		2	2	B
(4.)	COD		mg/l		12	4	B
(5.)	Others	TPH	Others	micro gm/l	6.8	3.8	B

14.4. No. of Ambient Noise monitoring locations : 0										
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard					
(1.)	Leq(Day)	A-weighted decibels(dB(A))	0	0	55					
(2.)	Leq(Night)	A-weighted decibels(dB(A))	0	0	45					
14.5. No. of Soil Sample Monitored locations : 3										
S. No.	Parameter	Unit		Maximum Value	Minimum Value					
(1.)	pH			9.1	8.2					
(2.)	P(Phosphorus)	Milligram per Kilogram		0	0					
(3.)	Electric Conductivity	Milli equivalents per 100 Gram		0	0					
(4.)	N(Nitrogen)	Milligram per Kilogram		9	0					
(5.)	K(Potassium)	Milligram per Kilogram		0	0					
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 0 To 0</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 0 To 0</p> <p>(c)Whether Ground Water Intersection will be there ? No</p>										
15. Details of Water Requirement (During Operation)										
S. No.	Source	Source Other	Required Quantity	Distance from Source		Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
1	Others	Mumbai Port Authority	69.15	110		Supply vessel	Port supply	NA	30 Jan 2019	45.65
15.1. (a)Whether Desalination is proposed No										
16. Waste Water Management(During Operation)										
S.	Type/Sour	Quantity	Treatme	Treatme	Mode		Quantity of	Quantity		

No.	ce	of Waste Water Generated (KLD)	nt Capacity (KLD)	nt Method	of Disposal	Treated Water Used in Recycling/Reuse (KLD)	of Discharged Water (KLD)
1	Deck cleaning	10	15	ETP	Discharge into Seawater Body		10
2	Sewage	10.8	15	STP	Discharge into Seawater Body		10.8

(a)Total Waste Water Generation 20.8
16.1. (b)Total Discharged Water 20.8
(c)Total Reused Water 0

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Drill cuttings	Industrial Waste	1344	Tons	0	Others	Disposed in the sea	Others	Disposed as per MoEF&C C guidelines
(2.)	Spent mud	Industrial Waste	720	Tons	0	Others	Disposed in the sea	Others	Disposed as per MoEF&C C guidelines

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10	Microgram per Meter Cube	0	1.2	1.31	1.312	100

(2.)	PM2.5		Microgram per Meter Cube	0	1.2	0.11	0.112	60
(3.)	SO2		Microgram per Meter Cube	0	1.2	2.808	2.8085	80
(4.)	NOx		Microgram per Meter Cube	0	1.2	23.11	23.112	80
(5.)	Others(Specify)	CO	Microgram per Meter Cube	0	1.2	6.035	6.0356	2000

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	DG	HSD	7	0.6	PM10		0.175
(2.)	DG	HSD	7	0.6	Others	CO	0.305
(3.)	DG	HSD	7	0.6	NOx		2.082
(4.)	DG	HSD	7	.06	SO2		0.0272

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 3750
 (b)Source DG Sets (3 x 1250 KVA)
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) DG (3 x 1250 KVA)
 (e)Stack Height (in m) 7

Land Ownership Pattern:

- (a)Forest Land 0
 (b)Private Land 0
 20. (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 56.016
Total Land 56.016

Present Land Use Breakup of the Study Area in Ha:

21. (a)Agriculture Area 0

(b)Waste/Barren Land	0
(c)Grazing/ Community Land	0
(d)Surface Water Bodies	0
(e)Settlements	0
(f)Industrial	0
(g)Forest	0
(h)Mangroves	0
(i)Marine Area	0
(j)Others : Offshore area	0
Total	0

22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Others	Offshore drilling	0	Offshore drilling
Total			0	

Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :

23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Critically Polluted Area	No	0	Not falling in critically polluted area
(2.)	WLS	No	0	No WLS
(3.)	Corridors	No	0	No ESZ
(4.)	Wildlife Corridors	No	0	No Wildlife corridor
(5.)	ESAs	No	0	No ESA
(6.)	NPA	No	0	No NPA
(7.)	ESZs	No	0	No ESZ

23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental	Other Details of	Name	Distance from the Project (Km)	Remarks

	Sensitivity	Environmental Sensitivity			
(1.)	Forest		No	0	No Forest
(2.)	Archaeological Sites		No	0	No archaeological site
(3.)	Others	NA	No	0	NA
(4.)	Defence Installations		No	0	No Defense Installation

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired offshore area land is not required

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R NA

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? No

(b)Whether conservation plan for Schedule-I Species has been prepared ? No

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

(a)Whether there is Presence of Water Bodies in Core Area ? Yes

29. (i)Details of Water Bodies in Core Area Offshore area

(b)Whether there is Diversion Required? No

(c)Whether permission has been obtained from competent authority? No

Details of Presence of Water Bodies in Buffer Area:

(a)Whether there is Presence of Water Bodies in Buffer Area? Yes

30. (i)Details of Water Bodies in Buffer Area offshore area

(ii)Direction of Water Bodies in Buffer Area North

(iii)Distance of Water Bodies in Buffer Area 0

Manpower Requirement:

(a)Permanent Employment-During Construction 0

(b)Permanent Employment-During Operation 55

31. (c)Temporary Employment- During Construction 120

(d)Temporary Employment- During Operation 0

(e)No. of working days 365

(f)Total Manpower 175

Green Belt in Ha:

(a)Total Area of Green Belt 0

32. (b)Percentage of Total Project Area 0.00

(c)No. of Plants to be Planted 0

(d)Funds Allocated for Plantation 0

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Direct Employment during drilling the well at each location will be 100 people and indirect employment will be 75. During production direct employment will be 25 and indirect employment will be 50
(2.)	Environmental	India's economic growth is closely related to energy demand; therefore, the need for oil and gas is projected to grow more, thereby making the sector quite conducive for investment.
34. CRZ Specific Details : Not Applicable 35. Sector Specific Details : NOT APPLICABLE		
<p><u>Details of Court Cases:</u></p> <p>36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>38. (a) Have you hired Consultant for preparing document? Yes</p> <p>(i) Accreditation No. NABET/EIA/1619/RA-0055</p> <p>(ii) Name of the EIA Consultant ERM India Private Limited</p> <p>(iii) Address Building 10, Tower A, 4th Floor, DLF Cyber City, Gurgaon 122002</p> <p>(iv) Mobile No. 0981006816</p> <p>(v) Landline No. 0124417030</p> <p>(vi) Email Id subir.gupta@erm.com</p> <p>(vii) Category of Accreditation A</p> <p>(viii) Sector of Accreditation Industrial Projects - 2</p> <p>(ix) Validity of Accreditation 31 Oct 2019</p> <p>39. Additional Detail Sought</p>		
<p align="center">Additional Detail Sought</p>		

Sno.	ADS Letter	Remarks	Date of ADS
1.	NA	Deferred	17 May 2019
2.	<u>ADS Letter</u>	Reply to ADS submitted.	13 Sep 2019

13.3.8.2: The proposal was earlier considered by the EAC in its meeting held during 6-8 May, 2019. The Committee found the proposal deficient in respect of compliance of many of the terms and conditions stipulated in the standard ToR dated 1st February, 2018, with the details as under:-

- (i) Baseline air quality of the areas immediately affected by the development drilling, particularly with reference to Sulphur Dioxide, NOx and background levels of Hydrocarbons and VOCs (primary or secondary data with source).
- (ii) Details on estimation and computation of air emissions (such as Nitrogen Oxides, Sulphur Oxides, Carbon Monoxide, Hydrocarbons, VOCs, etc) resulting from flaring, DG sets, combustion, etc.
- (iii) Baseline data collection within 1km of each development well, in respect of oil/metal/hydrocarbon content in the surface water and sediments (Primary data)
- (iv) Source of fresh water, water balance and waste water treatment mechanism and details of produced water facility.
- (v) Procedure for handling oily water discharges from deck washing, drainage systems, bilges, preventing spills and spill contingency plans, treatment and disposal of produced water.
- (vi) Details of blowout preventer installation.

- (vii) Risk assessment and mitigation measures.
- (viii) Details of all environment and safety related documentation within the company (regarding Life of pipeline, Corrosion prevention method, inspection etc) in the form of guidelines, manuals, monitoring programmes including Occupational Health Surveillance Programme etc.
- (ix) Applicability of OISD Standards.

13.3.8.3 The EAC, after presentation by PP, noted the following:-

- Standard Terms of Reference for the project was issued on 1st February, 2018. Public hearing has not been conducted as the project is located at 110 km (~ 59 nm) from the shore.
- Total water requirement estimated for the drilling is 59.15 cum/day, which includes fresh water requirement of 49.15 cum/day, proposed to be met through supply vessel and stored on board the rig. The balance water requirement will be met through seawater, which will be lifted from the rig location. During operational phase water required for firefighting will be sourced from sea water. Water required for drinking and utility will be produced at MOPU by suitably sized desalination plant for which the source water will be seawater.
- Rs. 5 crores has been earmarked for livelihood augmentation plan of fisherman and waste management in the coastal area of Maharashtra.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

13.3.8.4 *The EAC, after deliberations, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-*

A. Specific Conditions:-

- i. *No drilling shall be carried out in Protected Areas*
- ii. *Marine water, sediments and bio-diversity shall be analyzed every six months during the drilling operations through approved Institutes. Data shall be submitted to Regional Office comparing with pre-drilling scenario.*
- iii. *Residual chlorine from on board STP shall be handled as per MARPOL convention.*
- iv. *No lead acid batteries shall be utilized in the project/site.*
- v. *PP will have Tier-I facility for Oil Spill Response and Coast Guard Approved Contingency Plan. In addition PP shall have an Agreement with International Service Provider for handling larger Oil Spill.*

B. General Conditions:-

I. Statutory compliance:

- i. *The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- ii. *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- iii. *The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2019, as applicable*

II. Air quality monitoring and preservation

- i. *The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with*
- ii. *To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS..*

- iii. During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
 - iv. The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- III. Water quality monitoring and preservation
 - i. As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Domestic sewage shall be disposed off through septic tank/soak pit.
 - ii. Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- IV. Noise monitoring and prevention
 - i. The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
 - ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
 - iii. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- V. Waste management
 - i. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
 - ii. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office
- VI. Safety, Public hearing and Human health issues
 - i. Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India
 - ii. Blow out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
 - iii. Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.
 - iv. On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority
 - v. The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations
 - vi. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.

- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
 - viii. The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus
 - ix. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- VII. Corporate Environment Responsibility
- vi. At least Rs. 5 crores shall be allocated for Corporate Environment Responsibility (CER) for augmenting livelihood of the fisherman and for waste management in the coastal areas, and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
 - vii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - viii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - ix. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - x. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- VIII. Miscellaneous
- i. Decommissioning of the project site shall be carried out as per DGH guidelines and report shall be sent to the Ministry's Regional Office.
 - ii. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
 - iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iv. The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- vi. *The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*
- vii. *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
- viii. *Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office*
- iv. *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
- v. *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- ix. *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- x. *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- xi. *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- xii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiii. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xiv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xv. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.*

Agenda No.13.4.1

Expansion of synthetic Rubber and allied product at 27,105, 131-137, 103, 104 at village Dungri, District Bharuch (Gujarat) by M/s Apcotex Industries Limited- Amendment in EC. [IA/GJ/IND2/116418/2019, J-11011/242/2005-IA.II(I)]

The project proponent vide email has informed their inability to attend the present meeting and requested for consideration in the meeting. The proposal was accordingly not taken by the Committee for consideration.

Agenda No.13.4.2

Exploration and Production of coal bed methane gas in Raniganj (South) CBM Block, West Bengal by M/s Great Eastern Energy Corporation Ltd - For reconsideration for amendment in EC.

[IA/WB/IND2/115543/2019, J-11011/352/2010-IA.II(I)]

13.4.2.1 The proposal is for amendment in the Environmental Clearance (EC) granted by the Ministry vide letter dated 24th November 2011 to the project for Exploration and Production of Coal Bed Methane Gas in Raniganj (South) CBM block, located at Districts Paschim Burdwan,

Bankura, Purulia in West Bengal in favour of M/s Great Eastern Energy Corporation Ltd. The validity of the said EC was extended till 24th November, 2021 vide Ministry's letter dated 1st May, 2019.

13.4.2.2 The project proponent has requested for amendment in the EC with the details as under.

S. No	Para of EC	Details as per the EC	To be revised and read as	Remarks
1	2.0	200 production wells up to 1100 m will be drilled to produce coal bed methane (CBM)	Out of total no of 200 production wells; 180 production wells up to 1100 m will be drilled to produce coal bed methane (CBM) and remaining 20 exploratory wells are proposed to be drilled for shale gas up to depth of 3000 m	As per the New MoPNG Notification dated 20 th August, 2018, GEECL is allowed to explore and exploit unconventional hydrocarbons (Shale gas) in the existing Raniganj (South) CBM block. The subsurface shale layer of the area was found in the depth upto 3000 m
2	Specific Condition A (ii)	Only 200 pilot-cum-production wells shall be drilled up to a depth of 1100 m	Out of total 200 pilot-cum-production wells; 180 pilot-cum-production wells up to 1100 m will be drilled to produce coal bed methane (CBM) and remaining 20 exploratory wells are proposed to be drilled for shale gas up to depth of 3000 m	

13.4.2.3 The proposal was earlier considered by the EAC in its meeting held during 29-31 July, 2019. The Committee observed that exploration of shale gas by drilling of additional 20 wells, would involve significant change in scope of work envisaged under the existing EC dated 24th November, 2011. Accordingly, the project would actually be covered under expansion category, and not admissible in its present form. The project proponent was asked to submit the proposal accordingly.

13.4.2.4 *The EAC, after detailed deliberations, recommended for amendment in the EC to include drilling of 20 shale gas wells, out of total 200 approved wells, with additional condition of PP shall ensure the quality of the water injected into the wells shall confirm to the standards of IS 10500 and all other terms and conditions remain unchanged.*

Agenda No.13.4.3

Pesticides intermediates & specialty chemicals in existing inorganic chemicals unit and proposed bromine recovery & formulation & packing of pesticides/agrochemicals of M/s Pragna Pharma Pvt. Ltd & M/s Pragna Pharma Pvt Ltd (Unit-2) Plot No. D2/CH/224 & D2/CH/224/1, GIDC Industrial Estate, Dahej-2, Tal Vagra, Dist Bharuch (Gujarat)- For merger of EC reg.

[IA/GJJ/IND2/65008/2017, IA-J-11011/299/2017-IA-II(I)]

The project proponent vide email has informed their inability to attend the present meeting and requested for consideration in the meeting. The proposal was accordingly not taken by the Committee for consideration.

Day 2: 24th October 2019

13.5 Environmental Clearance

Agenda No.13.5.1

Proposed Greenfield Ammonium Phosphate Fertilizer Complex –1.02 MTPA (2 x 0.51 Million TPA) at Village Biliya, Tehsil & District Chittorgarh (Rajasthan) by M/s HZL Fertilizer Project - Environmental Clearance

[IA/RJ/IND2/60077/2016, J- 11011/350/2016-IA.II(I)]

13.5.1: The proposal is for environmental clearance for the proposed Greenfield Ammonium Phosphate Fertilizer Complex –1.02 MTPA (2 x 0.51 Million TPA) at Village Biliya, Tehsil & District Chittorgarh (Rajasthan) by M/s HZL Fertilizer Project. The project activity covered under item 5(a) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	1.02 MTPA (2 x 0.51 Million TPA) Ammonium Phosphate Fertilizer-Chemical Fertilizer Complex of M/s Hindustan Zinc Limited
1.	(b)Name of the Company / Organisation	HZL FERTILIZER PROJECT
	(c)Registered Address	Hindustan Zinc Limited, Yashad Bhawan, Near Swaroop Sagar,Udaipur,Rajasthan-313004
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Subhendu Mishra
	(b)Designation (Owner/ Partner/ CEO)	Chief Project Officer
2.	(c)Address	Hindustan Zinc Limited,Yashad Bhawan, Near Swaroop Sagar,,Girwa,Udaipur,Rajasthan-313004
	(d)Pin code	313004
	(e)E-mail	subhendu.mishra@vedanta.co.in
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(a) Chemical fertilizers
	(b)Category	A
	(c)Proposal Number	IA/RJ/IND2/60077/2016
3.	(d)Master Proposal Number(Single Window)	SW/115174/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	New project

Location of the Project:

- (a)Plot/Survey/Khasra No. 38,40,70,272,295,296 & 307
 (b)Pincode 312021
 4. (c)Bounded Latitudes (North) FROM 24.969136 To 24.975468
 (d)Bounded Longitudes (East) FROM 74.659200 To 74.667857
 (e)Survey of India Topo Sheet No. 45 L/9, 45 K/12
- (a)Number of States in which
 5. Project will be Executed 1
 (b)Main State of the project Rajasthan

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Rajasthan	Chittorgarh	Chittaurgarh	Biliya

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number J- 11011/350/2016-IA.II(I)
 6. (b)Date of Apply of TOR 31 Oct 2016
 (c)Date of Issue of TOR / Standard ToR 13 Dec 2016

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
 (b)Whether details of Public Hearing available? Yes
 7. (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S I	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
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1	Date of Advertisement : 01 Jan 2019	Distance of Public Hearing Venue from the Proposed Project : 1.5	12 Feb 2019	Government Secondary School, Biliya, Chittorgarh, Rajasthan	State : Rajasthan District : Chittorgarh Tehsil : Chittaurgarh Village : Biliya	1500	Public hearing for the proposed new project was conducted at the Government secondary School Biliya Premises in the presence of ADM, Revenue department officials and Regional Officer of RSPCB . Issue	ADM
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8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Aluminium Fluoride Plant	18000 TPA	Two Phases
(2.)	DAP/NPK/APS Plant	1.02 MTPA/1.0 MTPA/0.4 MTPA	Two Phases
(3.)	Phosphoric Acid Plant	0.48 MTPA 100% P2O5 BASIS	Two Phases

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport of	Other Mode of
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				Product	Transport of Product
(1.)	Phosphoric acid (100% P2O5 basis)	480000	Tons per Annum	Others	Will be consumed within the process.
(2.)	DAP/NPK/APS	1020000	Tons per Annum	Road,Rail	
(3.)	Aluminium Fluoride	18000	Tons per Annum	Road,Rail	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Project Cost:

(a) Total Cost of the Project at current price level (in Crores) 2700

(b) Funds Allocated for Environment Management (Capital) (in Crores) 185

10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 13.5

(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 37

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification?** No

12. **Whether project attract the Specific Condition specified in the Schedule of EIA Notification?** No

Raw Material / Fuel Requirement:

(a) Proposed quantity of raw material/fuel 3479000

13. (b) Existing quantity of raw material/fuel N/A

(c) Total quantity of raw material/fuel 3479000

13.1. Raw Material / Fuel Profile

S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site	Type of Linkage	Other Type of Linkage
(1.)	Sulfuric Acid	1440000	Tons per Annum	Captive	Pipeline	0.7	Captive	
(2.)	Potash	64000	Tons per Annum	Import	Road,Rail	580	Open Market	
(3.)	Aluminum hydroxide	21000	Tons per Annum	Domestic	Road,Rail	1100	Others	Group Company
(4.)	ammonia	240000	Tons per Annum	Import	Road,Rail	580	Open Market	
(5.)	Rock Phosphate	1580000	Tons per Annum	Import	Road,Rail	580	Open Market	
(6.)	Urea	22000	Tons per Annum	Import	Road,Rail	580	Open Market	
(7.)	Filler	112000	Tons per Annum	Domestic	Road,Rail	600	Open Market	Market

Baseline Data :

14. (a)Period of Base Line Data Collection

FROM 01 Dec 2016 To 28 Feb 2017

(b)Season

Winter

14.1. **No. of ambient Air Quality (AAQ) monitoring locations : 8**

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
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(1.)	SO2		Micro Gram per Meter Cube	21.5	6.8	21.2	80		
(2.)	PM2.5		Micro Gram per Meter Cube	57	20	55	60		
(3.)	NOx		Micro Gram per Meter Cube	31.6	8.6	30	80		
(4.)	CO		Micro Gram per Meter Cube	1.26	0.18	1.26	4.0		
(5.)	PM10		Micro Gram per Meter Cube	96	40	96	100		
14.2. No. of Ground Water monitoring locations : 8									
S. No .	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	Others	Zinc		mg/l		0.90	0.10	5	15
(2.)	Chlorides			mg/l		336	71	250	1000
(3.)	pH			Others	-	7.92	6.95	6.5	8.5
(4.)	TSS			mg/l		2.2	0.8	0	0
(5.)	TDS			mg/l		1302	376	500	2000
(6.)	Total Hardness			mg/l		588	192	200	600
(7.)	Fluoride			mg/l		0.66	0.34	1.0	1.5
(8.)	Heavy Metals		Iron	mg/l		0.56	0.16	0.3	1.0
14.3. No. of Surface Water monitoring locations : 4									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		NA		7.71	7.21	D		
(2.)	DO		mg/l		5.6	4.2	D		

(3.)	BOD		mg/l		6.6	4.9	D
(4.)	COD		mg/l		24.4	19	D
(5.)	Others	Zinc	mg/l		0.48	0.38	D

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	64.2	48.9	55-75
(2.)	Leq(Night)	A-weighted decibels(dB(A))	52.8	39.6	45-65

14.5. No. of Soil Sample Monitored locations : 6

S. No.	Parameter	Unit	Maximum Value	Minimum Value
(1.)	N(Nitrogen)	Kilogram per hectare	287.6	266.8
(2.)	Electric Conductivity	Millisiemens per Centimetre	305.5	262.5
(3.)	K(Potassium)	Kilogram per hectare	255.6	222.5
(4.)	P(Phosphorus)	Kilogram per hectare	21.5	16.8
(5.)	pH		7.72	7.45

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 11 To 19

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 5 To 22

(c)Whether Ground Water Intersection will be there? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Others	Gosunda Dam, Proposed STP	10100	23	Pipeline	Intake Well	CEWR/TA(W)/F-23/HZL/986	20 May 200	34000

		Chittorgarh and Udaipur							9	
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15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)
1	Trade Effluent	4220	4800	Physiochemical process	Others	Zero Liquid Discharge	4220	0

(a)Total Waste Water Generation 4220

16.1. (b)Total Discharged Water 0

(c)Total Reused Water 4220

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
1	Phosphogypsum	Industrial Waste		270000	Tons	300	Road		Others	Sold to cement industries
2	Used and waste oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		300	Tons	700	Road		Others	Sold to authorised recyclers

3	Dry ETP Sludge	Industrial Waste		6000	Tons	0.5	Others	Internal Road	Others	Secured Landfill at Site
4	Discarded containers	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		5	Tons	700	Road		Others	Sold to authorized recyclers

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants		Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
1	PM2.5		Microgram per Meter Cube	57.0	0.15	0.69	57.7	60
2	NOx		Microgram per Meter Cube	31.6	0	0	31.7	80
3	PM10		Microgram per Meter Cube	96	0.15	3.05	99.06	100
4	SO2		Microgram per Meter Cube	21.5	0	0	21.6	80
5	Others(Specify)	NH3	Microgram per Meter Cube	28	0	0.37	28.38	400

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
1	PAP Fluorine Scrubber Stack	NA	60	1.8	Others	Fluorine	15 mg/NM3
2	DAP/NPK/AP S Plant Scrubber Stack	NA	50	3.1	Others	Ammonia	25 mg/NM3
3	AIF 3 Fluorine Scrubber Stack	NA	30	0.55	Others	Fluorine	15 mg/NM3
4	PAP Scrubber Stack	NA	30	0.8	Others	Fluorine	15 mg/NM3

Power Requirement:

19. (a)Quantity (Kilo Volt Amps (kVA)) 35
(b)Source State Grid / existing Zinc Smelter CPP
(c) Standby Arrangement (Details of DG Sets) 4 DG (2500 KVA x 4)
(d) Stack Height (in m) 16

Land Ownership Pattern:

20. (a)Forest Land 0
(b)Private Land 101.45
(c)Government Land 0
(d)Revenue Land 0
(e)Other Land 0
Total Land 101.45

Present Land Use Breakup of the Study Area in Ha:

21. (a)Agriculture Area 163.75
(b)Waste/Barren Land 0.63
(c)Grazing/ Community Land 0
(d)Surface Water Bodies 8.15
(e)Settlements 24.74
(f)Industrial 0
(g)Forest 100.08
(h)Mangroves 0
(i)Marine Area 0
(j)Others : Land with Open Scrub and mining area 40.67

Total		338.02			
22. Land requirement for various activities					
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks	
(1.)	Main Plant		47.73	-	
(2.)	Green belt		53.72	49.31 ha greenbelt developed	
Total		101.45			
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Corridors	None	0	-	
(2.)	NPA	Nearest RF Bheeliya Khera RF and Other RF	7	-	
(3.)	ESAs	None	0	-	
(4.)	Wildlife Corridors	None	0	-	
(5.)	Critically Polluted Area	None	0	-	
(6.)	WLS	None	0	-	
(7.)	ESZs	None	0	-	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		None	0	-
(2.)	Forest		Nearest RF	7	-

			Bheeliyakhera RF Other RF		
(3.)	Archaeological Sites		Chittorgarh Fort	8.5	South direction from the site
23.3.	<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p><u>Land Acquisition Status:</u></p> <p>26. (a)Acquired Land(Ha) 101.45</p> <p>(b)Land yet to be acquired(Ha) 0</p> <p>(c)Status of Land acquisition if not acquired Required land is already acquired</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>27. (a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced Families) 0</p> <p>(d)No. of PAFs (Project Affected Families) 0</p> <p>(e)Funds Allocated for R&R(in Rs) 0</p> <p>(f)Status of R&R Completed</p> <p><u>Details of Presence of Schedule-I Species:</u></p> <p>28. (a)Whether there is Presence of Schedule-I Species ? No</p> <p>(b)Whether conservation plan for Schedule-I Species has been prepared ? No</p> <p>(c)Whether conservation plan for</p>				

Schedule-I Species has been approved by competent authority ?

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? No
29. (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer Area Seasonal Berach River, Seasonal Gambhiri River and Putholi Nalla
- (ii)Direction of Water Bodies in Buffer Area South East
- (iii)Distance of Water Bodies in Buffer Area 5.5

Manpower Requirement:

- (a)Permanent Employment-During Construction 50
- (b)Permanent Employment-During Operation 200
31. (c)Temporary Employment- During Construction 0
- (d)Temporary Employment- During Operation 0
- (e)No. of working days 365
- (f)Total Manpower 250

Green Belt in Ha:

- (a)Total Area of Green Belt 53.72
32. (b)Percentage of Total Project Area 52.95
- (c)No. of Plants to be Planted 6000
- (d)Funds Allocated for Plantation 30000000

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
NIL		

34. **CRZ Specific Details : Not Applicable**

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/SA070; July 17, 2018 Validity Exten
- (ii) Name of the EIA Consultant EQMS India Pvt. Ltd.
- (iii) Address 304-305, 3rd Floor, Plot No. 16, Rishabh Corporate Tower, Community Centre, Karkardooma, Delhi â€“ 110092
- (iv) Mobile No. 8826191660
- (v) Landline No. 0113000320
- (vi) Email Id eqms@eqmsindia.org
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 23 Nov 2019

13.5.2: The EAC after presentation by the PP, noted the following:

- Terms of Reference for the project was issued on 29th May, 2017. Public hearing for the project has been conducted by the State Pollution Control Board on 12th February, 2019. The main issues raised during public hearing are related to employment, pollution, land conversion from greenbelt to industrial use etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Seasonal river Berach is passing about 680 m and Gambhiri river is at 5.5 km from the project site.
- Total water requirement is estimated to be 10,100 cum/day, proposed to be met from Gosunda dam/STP Udaipur/ proposed STP at Chittorgarh town. Effluent of 4220 cum/day will be treated in ETP of capacity 4800 cum/day and recycled back in the system. Domestic Sewage water will be treated in sewage treatment plant (120 cum/day) and treated water will be utilized for plantation purpose and other uses. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- Most of the raw material was proposed through rail but there was no distinction provided which comes through rail and which comes through road

- PP did not submit point wise response on the issues raised by the public during public consultation
- The PP envisaged only a virtual boundary for the proposed project. The committee suggested for a physical boundary and 33% green belt shall be covered inter alia including plantation along the boundary with 10 m width and native and broad leaved tree species.
- As per the guidelines provided in the OM dated 1st May, 2018, the amount of CER shall be clacuated on the slab basis and it comes to an amount of Rs. 21.5 Crs. Inlights of the various issues emerged in the public consultation, the committee desired to increase the CER fund provision from 21.5 Crores to 25 Crores and the PP has agreed to it.

13.5.3: *The EAC, after deliberations, asked for clarification/inputs in respect of the following:-*

- *Detailed effluent treatment plan with Zero Liquid Discharge system. ETP shall be refined/modernized.*
- *Revised water balance.*
- *Speaker wise, point wise, response on the issues rasied during the public consultation along with time bound action plan and budetory provision.*
- *Detailed mode transportation plan for raw materials & products.*
- *Commitment on the implementation of recommendations of 3D numerical modeling of the risk assessment.*
- *Revised layout plan with 10 m wide green belt along the plant periphery covering 33% of the project area, with specificdemarcation of parking area.*
- *CER plan with a fund provision of Rs. 25 Crores envisaging the proposed activities to address the issues rsaied in the public consulatation and need based assessment interalia including time bound action plan and fund provision for each compenent.*
- *GLC data to be checked and be presented with original inputs and calculation.*

The proposal was, therefore, deferred.

Agenda No.13.5.2

Expansion of Bulk drug and Intermediates manufacturing unit at SY.NO. 404, 405, 407, 408, 409 AND 410, Veliminedu Village, Chityal Mandal, Nalgonda District, Telangana by M/s. Dasami Lab Pvt. Ltd. - Environmental Clearance [IA/TG/IND2/115224/2016, J-11011/57/2016-IA.II(I)]

13.5.1: The proposal is for environmental clearance for the proposed expansion of Bulk drug and Intermediates manufacturing unit at SY.NO. 404, 405, 407, 408, 409 AND 410, Veliminedu Village, Chityal Mandal, Nalgonda District, Telangana by M/s. Dasami Lab Pvt. Ltd.. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Expansion of Bulk drug and Intermediates manufacturing unit by M/s. Dasami Lab Pvt. Ltd.

(b)Name of the Company / Organisation	DASAMI LAB PVT LTD			
(c)Registered Address	Dasami Lab Pvt. Ltd.,Nalgonda,Telangana-508114			
(d)Legal Status of the Company	Central Government			
(e)Joint Venture	No			
<u>Address for the correspondence:</u>				
(a)Name of the Applicant	Vasudeva Reddy M			
(b)Designation (Owner/ Partner/ CEO)	GMCorporateEHS			
2. (c)Address	Dasami Lab Pvt. Ltd.,Sy. No.s 404, 405, 407, 408, 409 and 410, Veliminedu Village, Chityal Mandal, Nalgonda District, Telangana,Chityala,Nalgonda,Telangana-508114			
(d)Pin code	508114			
(e)E-mail	vasudevareddy.m@heterodrugs.com			
<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>				
(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk			
(b)Category	A			
3. (c)Proposal Number	IA/TG/IND2/115224/2016			
(d)Master Proposal Number(Single Window)	SW/115222/2019			
(e)EAC concerned (for category A Projects only)	Industrial Projects - 2			
(f)Project Type	Expansion			
<u>Location of the Project:</u>				
(a)Plot/Survey/Khasra No.	Sy. No. 404, 405, 407, 408, 409 and 410			
(b)Pincode	508114			
4. (c)Bounded Latitudes (North)	FROM 17.132105 To 17.133794			
(d)Bounded Longitudes (East)	FROM 79.025114 To 79.025935			
(e)Survey of India Topo Sheet No.	EaaM15, E44M16, E44N3 and E44N4			
5. (a)Number of States in which Project will be Executed	1			
(b)Main State of the project	Telangana			
Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name

(1.)	Telangana	Nalgonda	Chityala	Veliminedu
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Details of Terms of Reference (ToR)/EC:

(a) MoEF&CC / SEIAA File Number J-11011/57/2016-IA.II(I)

6. (b) Date of Apply of EC 27th January, 2016

(c) Date of Issue of EC 8th June 2017

(d) Previous EC Letter F. No. J-11011/533/2007-IA.II (I), dt. 21.02.2008

Details of Public Consultation:

(a) Whether the Project Exempted from Public Hearing? No

7. (b) Whether details of Public Hearing available? Yes

(c) Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertising : 13 Aug 2018	Date : 14 Sep 2018 Distance of Public Hearing Venue from the Proposed Project : 0.1	Near the existing plant area	State : Telangana District : Nalgonda Tehsil : Chityala Village : Veliminedu	450	Employment Generation Pollution control measures Village development	Joint Collector & Addl. District Magistrate

Details of Project Configuration/Product:

8. Details Not Applicable

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

(a)Details of certified report on compliance of earlier environmental clearance condition

9. (i)Certified Compliance By Regional
(ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which Chennai
certified report on
(iii)Letter No. EP/12.1/2017-18/1/TE/1131
(iv)Status of Compliance Compiled
(v)Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report) Certified Compliance Report obtained
(vi)Date of site visit 06.06.2019

(b)Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	
(1.)	Clopidogrel Hydrogen Sulfate	5	5	10	Others	TPM	Road	
(2.)	Drotaverine HCl	2.5	0.5	3	Others	TPM	Road	
(3.)	Omeprazole	5	0	5	Others	TPM	Road	
(4.)	Rampril	5	2	7	Others	TPM	Road	
(5.)	Sparfloxacin	4	16	20	Others	TPM	Road	
(6.)	Tramadol HCl	5	7	12	Others	TPM	Road	
(7.)	Amlodipine Besylate	0	20	20	Others	TPM	Road	
(8.)	Bocepravir	0	6	6	Others	TPM	Road	
(9.)	Bupropion HCl	0	20	20	Others	TPM	Road	
(10.)	Dexlansoprazole	0	5	5	Others	TPM	Road	
(11.)	Eslicarbazapine	0	2	2	Others	TPM	Road	
(12.)	Glimepride	0	3	3	Others	TPM	Road	
(13.)	Mesalamine	0	7	7	Others	TPM	Road	
(14.)	Sevelamir HCl	0	29	29	Others	TPM	Road	

(15.)	Ticagrelor	0	1	1	Others	TPM	Road	
(16.)	Valagancyclovir HCl	0	2	2	Others	TPM	Road	
(17.)	Anastrozole	0	2	2	Others	TPM	Road	
(18.)	Bendamustine HCl	0	2.5	2.5	Others	TPM	Road	
(19.)	Bexarotene	0	3	3	Others	TPM	Road	
(20.)	Bicalutamide	0	5	5	Others	TPM	Road	
(21.)	Cyclophosphamide	0	2	2	Others	TPM	Road	
(22.)	Emtricitabine	0	30	30	Others	TPM	Road	
(23.)	Erlotinib HCl	0	4	4	Others	TPM	Road	
(24.)	Lansoprazole	0	8	8	Others	TPM	Road	
(25.)	Lomitapide	0	2	2	Others	TPM	Road	
(26.)	Nebumitone	0	10	10	Others	TPM	Road	
(27.)	Posaconazole	0	7	7	Others	TPM	Road	
(28.)	Abiraterone Acetate	0	1	1	Others	TPM	Road	
(29.)	Capecitabine	0	2	2	Others	TPM	Road	
(30.)	Irinotecan HCl	0	14	14	Others	TPM	Road	
(31.)	Letrozole	0	2.5	2.5	Others	TPM	Road	
(32.)	Nilotinib HCl	0	2	2	Others	TPM	Road	
(33.)	Pazopanib HCl	0	2	2	Others	TPM	Road	
(34.)	Pemetrexed Disodium	0	0.5	0.5	Others	TPM	Road	
(35.)	Sorafenib Tosylate	0	6	6	Others	TOM	Road	
(36.)	Sunitinib Malate	0	6	6	Others	TPM	Road	
(37.)	Dalfampridine	0	17	17	Others	TPM	Road	
(38.)	Telaprevir	0	5	5	Others	TPM	Road	
(39.)	Bortezomib	0	0.5	0.5	Others	TPM	Road	
(40.)	Dasatinib	0	2	2	Others	TPM	Road	
(41.)	Gefitinib	0	2	2	Others	TPM	Road	
(42.)	Carvedilol	5	25	30	Others	TPM	Road	
(43.)	Duloxetine HCl	3	12	15	Others	TPM	Road	

(44.)	Aprimilast	0	3	3	Others	TPM	Road	
(45.)	Colisevelam	0	6	6	Others	TPM	Road	
(46.)	Divalproex Sodium	0	15	15	Others	TPM	Road	
(47.)	Fexofenadine HCl	0	10	10	Others	TPM	Road	
(48.)	Piperquine Phosphate	0	5	5	Others	TPM	Road	
(49.)	Ranolazine	0	10	10	Others	TPM	Road	
(50.)	Valacyclovir	0	6	6	Others	TPM	Road	
(51.)	Carboplatin	0	5	5	Others	TPM	Road	
(52.)	Cisplatin	0	2	2	Others	TPM	Road	
(53.)	Gemcitabine HCl	0	1	1	Others	TPM	Road	
(54.)	Imatinib Mesylate	0	16	16	Others	TPM	Road	
(55.)	Lapatinib Ditosylate Monohydrate	0	2	2	Others	TPM	Road	
(56.)	Oxaliplatin	0	4	4	Others	TPM	Road	
(57.)	Temozolomide	0	1	1	Others	TPM	Road	

(c)Details of Configuration

S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks
(1.)	API Bulk Drug and Intermediates	15	406	421	Tons Per Month

Details of Consent to Operate

- 9.1. (i)Whether Consent to operate obtained ? NA
- (ii)Copies of all Consent to operate obtained since inception NA
- (iii)Date of Issue 26 Mar 2016
- (iv)Valid Upto 30 Apr 2020
- (v)File No. TSPCB/RCP/NLG/HO/CFO/2016 02
- (vi)Application No. TSPCB/RCP/NLG/HO/CFO/2016 02

Project Cost:

10. (a)Total Cost of the Project at current price level (in Crores) 45

(b) Funds Allocated for Environment Management (Capital) 11.854 (in Crores)							
(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 1.11							
(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 15.475							
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ? No						
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ? No						
<u>Raw Material / Fuel Requirement:</u>							
(a) Proposed quantity of raw material/fuel 506							
13.	(b) Existing quantity of raw material/fuel 18						
(c) Total quantity of raw material/fuel 524							
13.1. Raw Material / Fuel Profile							
S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site	Type of Linkage
(1.)	Synthetic Organic and Inorganic Chemicals	6312	Tons per Annum	Indigenous	Road	200	Open Market
<u>Baseline Data :</u>							
14.	(a) Period of Base Line Data Collection		FROM 01 Mar 2017 To 01 Jun 2017				
	(b) Season		Summer				
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 10							

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM2.5		Micro Gram per Meter Cube	24	11	23	60
(2.)	SO2		Micro Gram per Meter Cube	12	9	12	80
(3.)	NOx		Micro Gram per Meter Cube	12	9	11	80
(4.)	PM10		Micro Gram per Meter Cube	56	32	54	100
(5.)	Others	VOC in PPM	NA	1.2	0.3	1.1	NA

14.2. No. of Ground Water monitoring locations : 10

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	Total Hardness			mg/l		790	130	200	200
(2.)	Fluoride			mg/l		0.87	0.4	1	1
(3.)	Chlorides			mg/l		365	74	250	250
(4.)	pH			NA		7.8	7	7	7
(5.)	TSS			mg/l		13	10	100	100
(6.)	TDS			mg/l		1081	327	500	500

)				I				
14.3. No. of Surface Water monitoring locations : 2								
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body	
(1.)	pH		NA		6.67	6	E	
(2.)	BOD		mg/l		4	3.7	B	
(3.)	COD		mg/l		13	11	B	
(4.)	DO		mg/l		4.4	4.3	B	
14.4. No. of Ambient Noise monitoring locations : 10								
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard			
(1.)	Leq(Day)	A-weighted decibels(dB(A))	53	44	55			
(2.)	Leq(Night)	A-weighted decibels(dB(A))	40	34	45			
14.5. No. of Soil Sample Monitored locations : 10								
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value			
(1.)	Electric Conductivity	Others	ds/m	0.3	0.04			
(2.)	N(Nitrogen)	Percent		0.29	0.017			
(3.)	K(Potassium)	Milligram per Kilogram		338	239			
(4.)	P(Phosphorus)	Percent		0.76	0.32			
(5.)	pH			8	6.8			
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 2.3 To 26</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 0.54 To 16</p> <p>(c)Whether Ground Water Intersection will be there ? No</p>								
15. Details of Water Requirement (During Operation)								

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Others	Mission Bhagiratha	272.73	100	Pipeline	Others	Pipeline	T1/DEE2/M B Grid/Bulk Water Connections/2017-18	07 Feb 2019	300

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/ Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	High TDS and High COD Stream	171.07	250	Sent to Stripper. Stripper condensate shall be disposed to cement industries for co-processing/ TSDF. Stripper bottom is sent to MEE followed by AFTD. Condensate from MEE shall be sent to biological treatment plant followed by	Others	Sent to ZLD System	155	16.07

				RO. RO rejects are sent to MEE and permeate is reused in cooling towers, boiler make-up and scrubbers				
(2.)	Low TDS and Low COD Stream	66	250	Sent to biological treatment system followed by RO. RO permeate reused for cooling towers, boiler make-up and scrubbers. RO rejects are sent to MEE.	Other s	Sent to ZLD System	60	6

(a)Total Waste Water Generation 237.07
16.1. (b)Total Discharged Water 22.07
(c)Total Reused Water 215

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Solvent Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2332.8	Tons	36	Road	Others	Sent to Cement plants for co-processing or TSDF

(2.)	Stripper Distillate	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	972	Tons	36	Road	Others	Sent to Cement plants for co-processing or TSDF
(3.)	Spent Carbon	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	356.4	Tons	36	Road	Others	Sent to Cement plants for co-processing or TSDF
(4.)	Evaporation Salts	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2592	Tons	42	Road	Treatment, Storage and Disposal Facility(TSDF)	
(5.)	Inorganic residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1245.6	Tons	42	Road	Treatment, Storage and Disposal Facility(TSDF)	
(6.)	Catalyst and Hyflow	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	67.5	Tons	42	Road	Treatment, Storage and Disposal Facility(TSDF)	
(7.)	Mixed Spent	Hazardous Waste (as	5400	Tons	42	Road	Others	Sent to authoriz

	Solvents	per Hazardous and Other Waste Management rules 2016)						ed recovery units
(8.)	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	126	Tons	42	Road	Treatment, Storage and Disposal Facility(TSDF)	
(9.)	Organic residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2235.6	Tons	36	Road	Others	Sent to Cement plants for co-processing or TSDF

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5	Microgram per Meter Cube	23	1.6	0.5	23.52	60
(2.)	SO2	Microgram per Meter Cube	12	1.6	3.3	15.36	80
(3.)	NOx	Microgram per Meter Cube	12	1.6	4.2	16.28	80
(4.)	PM10	Microgram per	54	1.6	1.1	55.16	100

		Meter Cube					
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18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Emission (GLS)
1	1 x 5 TPH	Coal	30	1.3	NOx	1.2 g/s
2	2 x10TPH Boiler	Coal	35	1.5	PM10	0.85 g/s
3	2 x 10 TPH Boiler	Coal	35	1.5	SO2	1.8 g/s
4	2 x 10 TPH Boiler	Coal	35	1.5	NOx	2.1 g/s
5	1 x 5 TPH Boiler	Coal	30	1.3	SO2	0.87 g/s
6	1 x 5 TPH Boiler	Coal	30	1.3	PM10	0.5 g/s

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 4000
 (b)Source TSSPDCL
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) 3 x 1000 kVA and 1 x 380 kVA
 (e)Stack Height (in m) 10

Land Ownership Pattern:

- (a)Forest Land 0
 (b)Private Land 20.64
 20. (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 0
Total Land 20.64
- (f)Industrial 20.64
 (g)Forest 0
 21. (h)Mangroves 0
 (i)Marine Area 0
 (j)Others : 0 0
Total 20.64

22. Land requirement for various activities					
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks	
(1.)	Green belt		7.28	35.3% of Total site area	
Total			7.28		
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Corridors	NA	0	No Corridors within 10 km Study Area	
(2.)	WLS	NA	0	No WLS within 10 km of Study Area	
(3.)	ESAs	NA	0	No ESAs within 10 km Study Area	
(4.)	ESZs	NA	0	No ESZs within 10 km Study Area	
(5.)	Critically Polluted Area	Patancheru and Bollaram	79	Critically Polluted Area	
(6.)	NPA	NA	0	No NPA within 10 km of Study Area	
(7.)	Wildlife Corridors	NA	0	No Wildlife Corridors within 10 km Study Area	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Archaeological Sites		NA	0	No Archaeological Sites within 10 km Study Area

(2.)	Defence Installations		NA	0	No Defence Installations within 10 km Study Area
(3.)	Forest		Chityal RF	6	in East
(4.)	Others	Reserve Forest	Shivanenigudem RF	9	in Northeast

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 20.64

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired Completed

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? No

(b)Whether conservation plan for Schedule-I Species has been prepared ? No

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

(a)Whether there is Presence of Water Bodies in Core Area? No

29. (b)Whether there is Diversion Required? No

(c)Whether permission has been obtained from competent authority? No

Details of Presence of Water Bodies in Buffer Area:

(a)Whether there is Presence of Water Bodies in Buffer Area ? Yes

30. (i)Details of Water Bodies in Buffer Area Seasonal nala Chinna Vagu

(ii)Direction of Water Bodies in Buffer Area South West

(iii)Distance of Water Bodies in Buffer Area 6.5

Manpower Requirement:

(a)Permanent Employment-During Construction 50

(b)Permanent Employment-During Operation 350

31. (c)Temporary Employment- During Construction 30

(d)Temporary Employment- During Operation 20

(e)No. of working days 360

(f)Total Manpower 450

32. **Green Belt in Ha:**

S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	0.97	6.31	7.29
(2.)	Percentage of Total Project Area	33	2.3	35.3
(3.)	No. of Plants	850	3550	4400
(4.)	Funds Allocated	6	12	18

33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment Potential
(2.)	Financial	Reduce imports of intermediates
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<p><u>Details of Court Cases:</u></p> <p>36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>38. (a)Have you hired Consultant for preparing document? Yes</p> <p>(i)Accreditation No. NABET/EIA/1619/RA/0077</p> <p>(ii)Name of the EIA Consultant Team Labs and Consultants</p> <p>(iii)Address TEAM Labs and Consultants B-115-117 & 509, Annapurna Block, Aditya Enclave, Ameerpet, Hyderabad-500 038</p> <p>(iv)Mobile No. 0402374855</p> <p>(v)Landline No. 0402374855</p> <p>(vi)Email Id teamlabs@gmail.com</p> <p>(vii)Category of Accreditation A</p> <p>(viii)Sector of Accreditation Industrial Projects - 2</p> <p>(ix)Validity of Accreditation 01 Dec 2019</p>		

13.5.2.2: The EAC, after presentation, noted the following:

- Standard Terms of Reference for the project was issued on 8th June, 2017. Public hearing for the project has been conducted by the Telangana State Pollution Control Board on 14th September, 2018. The main issues raised during public hearing are related to employment, ground water contamination, pollution control measures, odour nuisance, impact on human health, milch animals, village development, etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Chityal RF (6km)

&Shivanenigudem RF (9km) are located within 10 km from the project site. Seasonal nalaChinnaVagu is flowing at a distance of 6.5 km in southwest direction.

- Total water requirement is estimated to be 487.73 cum/day, which includes fresh water requirement of 272.73 proposed to be met from Mission Bhagiratha (Industrial supply). Necessary permission in this regard has been obtained from Mission Bhagiratha, Government of Telangana.
- Out of the total effluent (237.07 cum/day), high COD/TDS stream of 171.07 cum/day shall be segregated and sent to stripper followed by multiple effect evaporators (MEE), and agitated thin film dryer (ATFD). The condensate from stripper shall be sent to cement plants for co-incineration, while condensate from MEE and ATFD shall be mixed with low TDS/COD from utility blow downs. Domestic wastewater of 66 cum/day shall be treated in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers make-up.
- Certified report on the compliance status of the existing EC conditions have been forwarded by the Ministry's Regional Office vide letter dated 16th July, 2019.
- There were several issues were raised during the public consultation and the project proponent did not address all the concerns that are raised.
- The PP did not get transferred the EC of the existing project on the name of *M/s Dasami Lab Pvt Ltd*

13.5.2.3 *The EAC, after deliberations, asked for clarification/inputs in respect of the following:-*

- *Prior transfer of EC in favour of the present applicant i.e M/s Dasami Lab Pvt Ltd*
- *Detailed effluent treatment plan to achieve the Zero Liquid Discharge system..*
- *Plan for rain water harvesting system and revised water balance.*
- *Details of fuels and commitment for using less Sulphur content fuels*
- *Plan for emission control at 99.95% efficiency.*
- *Plan for odour management in the plant.*
- *Occupational health and management plan.*
- *Speaker wise, point wise, response on the issues raised during the public consultation along with time bound action plan and budgetary provision.*
- *CER plan envisaging the proposed activities to address the issues raised in the public consultation and need based assessment interalia including time bound action plan and fund provision for each component.*

The proposal was, therefore, deferred.

Agenda No.13.5.3

Proposed Project for Manufacturing of Dyes & Dye Intermediates– 400 MTPM at Survey No. 1384, Village Rajpur, Tal Kadi, Distt Mehsana, Gujarat by M/s Urmit Chemicals Pvt. Ltd- Environmental Clearance

[IA/GJ/IND2/89506/2018, F. No. J-11011/418/2018-IA-II(I)]

13.3.3.1 The proposal is for environmental clearance for the proposed project for Manufacturing of Dyes & Dye Intermediates– 400 MTPM at Survey No. 1384, Village Rajpur, Tal Kadi, Distt Mehsana, Gujarat by M/s Urmit Chemicals Pvt. Ltd. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
<u>Details of Project:</u>		
1.	(a) Name of the project(s)	Urmit Chemicals Pvt. Ltd.
	(b) Name of the Company / Organisation	URMIT CHEMICALS PVT. LTD.
	(c) Registered Address	Survey no. 1384, Village: Rajpur, Tal.: Kadi, Dist: Mehsana, Gujarat, Ahmedabad, Gujarat-380050
	(d) Legal Status of the Company	Private
	(e) Joint Venture	No
<u>Address for the correspondence:</u>		
2.	(a) Name of the Applicant	Amit Patel
	(b) Designation (Owner/ Partner/ CEO)	Director
	(c) Address	NIL
	(d) Pin code	380050
	(e) E-mail	urmitchem@gmail.com
<u>Category of the Project/Activity as per Schedule of EIA Notification, 2006:</u>		
3.	(a) Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b) Category	A
	(c) Proposal Number	IA/GJ/IND2/89506/2018
	(d) Master Proposal Number (Single Window)	SW/116903/2019
	(e) EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f) Project Type	New project
<u>Location of the Project:</u>		
4.	(a) Plot/Survey/Khasra No.	Survey No. 1384, Village: Rajpur, Tal: Kadi, Dist:
	(b) Pincode	380050
	(c) Bounded Latitudes (North)	FROM 23.346666 To 23.346944
	(d) Bounded Longitudes (East)	FROM 72.406944 To 72.408055
	(e) Survey of India Topo Sheet No.	F43A7
5.	(a) Number of States in which Project will be Executed	1
	(b) Main State of the project	Gujarat
Details of State(s) of the project		

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Mahesana	Kadi	Rajpur

Details of Terms of Reference (ToR):

- (a) MoEF&CC / SEIAA File Number IA-J-11011/418/2018-IA-II(I)
6. (b) Date of Apply of TOR 24 Dec 2018
- (c) Date of Issue of TOR / Standard ToR 04 Feb 2019

Details of Public Consultation:

- (a) Whether the Project Exempted from Public Hearing? No
7. (b) Whether details of Public Hearing available? Yes
- (c) Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 20 Jul 2019	Date : 21 Aug 2019 Distance of Public Hearing Venue from the Proposed Project : 6.0	Champaben Ratilal Patel Town Hall, Near Bhimnath Talav, Kadi, Ta: Kadi, Dist. Mehsana	State : Gujarat District : Mahesana Tehsil : Kadi Village : Kadi	50	Priority to local employment, Green belt development, women empowerment.	Additional district magistrate, Mehsana

8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Agitated Notch Filter	5 KL	2 Nos.
(2.)	Centrifuge Filter	48"	3 Nos.
(3.)	Glass Column Scrubber	00	2 Nos.
(4.)	Alkali Scrubber	00	2 Nos.
(5.)	Spin Flash Dryer	500 Liter/hr.	1 Nos.
(6.)	Spray Dryer	1000 Liter/hr.	1 Nos.
(7.)	HDPE Tank	20 KL	2 Nos.
(8.)	Ball Mill	1 MT	1 Nos.
(9.)	Boiler	2 T/hr	1 Nos.
(10.)	Hot Air Generator	5 Lakhs Kcal/hr.	1 Nos.
(11.)	D.G. set	500 KVA	1 Nos.
(12.)	RO	25 m3/hr.	1 Nos.
(13.)	MS Rubber Lined Reactor	75 KL	2 Nos.
(14.)	MS Glass Lined Reactor	5 KL	7 Nos.
(15.)	MS Rubber Lined Reactor	50 KL	3 Nos.
(16.)	Ball Mill	2 MT	2 Nos.
(17.)	Cooling Tower	200 TR	1 Nos.
(18.)	SS/MS/CI Reactor	5 KL	10 Nos.
(19.)	MS Rubber Lined Reactor	20 KL	3 Nos.
(20.)	MS Rubber Lined Reactor	10 KL	3 Nos.
(21.)	Filter Press	48" x 48"	4 Nos.
(22.)	HDPE Tank	10 KL	3 Nos.
(23.)	HDPE Tank	40 KL	2 Nos.
(24.)	MS Tank	50 KL	2 Nos.
(25.)	MS Blender	10 MT	2 Nos.
(26.)	MS Blender	5 MT	2 Nos.

(27.)	Ball Mill	0.5 MT	1 Nos.
(28.)	Ice Crusher	00	3 Nos.
(29.)	Pulverizer	00	3 Nos.
(30.)	Boiler	1 T/hr.	1 Nos.
(31.)	Hot Air Generator	10 Lakhs kcal/hr	1 Nos.
(32.)	Thermic Fluid Heater	25 Lakhs Kcal/hr.	1 Nos.
(33.)	Notch Filter	3 KL	2 Nos.
(34.)	MS Tank	20 KL	3 Nos.
(35.)	MSRL Reactor	10 KL	10 Nos.
(36.)	Vacuum Trey Dryer	200 Trey	1 Nos.
(37.)	Trey Dryer	600 Trey	1 Nos.
(38.)	Chilling Plant	200 TR	1 Nos.

8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport of Product	
(1.)	Dyes Intermediates(Chloranil,Ortho Amino Phenol ,Para Amino Phenol,Meta Amino Phenol ,Ortho Amino Phenol Sulphonic Acid etc.)	150	Others	MT/Month	Road	
(2.)	Basic Dyes Solid	50	Others	MT/Month	Road	
(3.)	Basic Dyes Liquid	100	Others	MT/Month	Road	
(4.)	Acid Dyes,Direct Dyes,Reactive Dyes	100	Others	MT/Month	Road	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

(b) Funds Allocated for Environment Management (Capital) 3.15 (in Crores)											
(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.16											
(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 4.017											
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ? No										
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ? No										
<u>Raw Material / Fuel Requirement:</u>											
(a) Proposed quantity of raw material/fuel 153250											
13.	(b) Existing quantity of raw material/fuel N/A										
(c) Total quantity of raw material/fuel 153250											
13.1. Raw Material / Fuel Profile											
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	As per attached sheet	153250	Tons per Annum		Local Market	Road		50	Open Market		
<u>Baseline Data :</u>											
14.	(a) Period of Base Line Data Collection					FROM 01 Jan 2019 To 31 Mar 2019					
	(b) Season					Winter					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 08											

S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		
(1.)	SO2		Micro Gram per Meter Cube	26.6	12.9	24.21	80		
(2.)	PM10		Micro Gram per Meter Cube	79.6	55.4	74.11	100		
(3.)	PM2.5		Micro Gram per Meter Cube	48.4	31.8	44.58	60		
(4.)	NOx		Micro Gram per Meter Cube	32.3	16.4	27.58	80		
14.2. No. of Ground Water monitoring locations : 08									
S. No .	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			Others	pH unit	7.9	7.3	8.5	8.5
(2.)	TDS			mg/l		1471	1130	500	2000
(3.)	Chlorides			mg/l		661	518	250	1000
(4.)	TSS			mg/l		10	5	00	00
(5.)	Fluoride			mg/l		0.75	0.65	1.0	1.5
(6.)	Total Hardness			mg/l		403	294	300	600
14.3. No. of Surface Water monitoring locations : 08									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	DO		mg/l		6.5	4.9	A		
(2.)	BOD		mg/l		10	5	A		
(3.)	pH		mg/l		7.81	7.29	A		
(4.)	COD		mg/l		20	10	A		
14.4. No. of Ambient Noise monitoring locations : 09									

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	54.5	50.9	75
(2.)	Leq(Night)	A-weighted decibels(dB(A))	43.3	40	70

14.5. No. of Soil Sample Monitored locations : 08

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	pH	Others	pH Unit	8.7	7.5
(2.)	Electric Conductivity	Millisiemens per Centimetre		1.52	1.38
(3.)	N(Nitrogen)	Milligram per Kilogram		134	104
(4.)	P(Phosphorus)	Milligram per Kilogram		73	39
(5.)	K(Potassium)	Milligram per Kilogram		246	178

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 20

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 5 To 8

(c)Whether Ground Water Intersection will be there? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Ground Water		103	00	Pipeline	Others	21-4/5265/GJ/IN D/2019	24 Jul 2019	103

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)										
S. N o.	Type/ Sourc e	Quantit y of Waste Water Genera ted (KLD)	Treatm ent Capaci ty (KLD)	Treatm ent Method	Mode of Disposal	Other Mode of Dispo sal	Quantity of Treated Water Used in Recycling/R euse (KLD)	Quantit y of Dischar ged Water (KLD)		
(1.)	Dome stic	7.5	00	Soak Pit	Others	Soak Pit	00	7.5		
(2.)	Industr ial	125	00	ETP- RO	Reuse within the Plant & Recycling,O thers	00	75	50		
<div>(a)Total Waste Water Generation 132.5</div> <div>16.1. (b)Total Discharged Water 57.5</div> <div>(c)Total Reused Water 75</div>										
17. Solid Waste Generation/Management										
S. No .	Name of Waste	Item	Oth er Item	Quan tity per Annu m	Unit	Dista nce from Site(KM)	Mode of Trans port	Other Mode of Trans port	Mode of Disposal	Other Mode of Disposal
(1.)	ETP Waste	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		1800	Ton s	25	Road		Treatme nt, Storage and Disposal Facility(T SDF)	
(2.)	Spent Sulfuri c Acid	Hazardo us Waste (as per Hazardo us and Other Waste		9360	Ton s	50	Road		Others	Reuse with in the process or sold to actual users.

		Manage ment rules 2016)								
(3.)	Iron Sludge	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		624	Ton s	50	Road		Treatme nt, Storage and Disposal Facility(T SDF)	
(4.)	Acetic Acid	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		1248	Ton s	50	Road		Others	Reuse within the process or sold to actual users.
(5.)	Sodiu m Bisulp hite	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		3120	Ton s	50	Road		Others	Reuse within the process or sold to actual users
(6.)	Spent Cataly st	Hazardo us Waste (as per Hazardo us and Other Waste		6	Ton s	50	Road		Others	return back to supplier for regenera tion.

		Manage ment rules 2016)								
(7.)	Fly Ash	Fly Ash		1825	Ton s	25	Road		Others	Sells to brick manufact urers
(8.)	Calciu m Thio sulphat e	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		936	Ton s	25	Road		Others	sell to actual users under Haz. Waste rule.
(9.)	Used Lubric ating Oil	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		0.5	Kiloli tre	25	Road		Authorize d Recycler s	
(10.)	Discar ded Barrels	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		15	Ton s	25	Road		Authorize d Recycler s	
(11.)	Discar ded bags/li	Hazardo us Waste		12	Ton s	25	Road		Authorize d Recycler	

	ners	(as per Hazardous and Other Waste Management rules 2016)							s	
(12.)	HCl (20-22%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		624	Tons	50	Road		Others	Actual users under Haz. Waste rule.

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10		Microgram per Meter Cube	66.85	1.0	4.161	71.012	100
(2.)	PM2.5		Microgram per Meter Cube	38.80	1.0	4.161	42.962	60
(3.)	SO2		Microgram per Meter Cube	18.36	1.0	3.154	21.515	80
(4.)	NOx		Microgram per Meter Cube	22	1.0	1.702	23.702	80

18.2. Stack Details							
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Steam Boiler (2 TPH)	Coal - 8 TPD	21	0.450	Others	PM, SO ₂ , NO _x	75 mg/Nm ³ , 40 mg/nm ³ , 25 mg/nm ³
(2.)	Thermic Fluid heater (25 Lakhs Kcal/Hr)	Coal 15 TPD	30	0.500	Others	PM, SO ₂ , NO _x	80 mg/Nm ³ , 40 mg/Nm ³ , 30 mg/nm ³
(3.)	Reaction vessel of multi purpose plant	--	21	0.225	SO ₂		30 mg/nm ³
(4.)	Steam Boiler (1 TPH)	Coal - 4 TPD	21	0.375	Others	PM, SO ₂ , NO _x	75 mg/Nm ³ , 40 mg/nm ³ , 25 mg/nm ³
(5.)	Hot Air Generator (10 lakhs Kcal/Hr)	Coal 6 TPD	30	0.450	Others	PM, SO ₂ , NO _x	80 mg/nm ³ , 40 mg/nm ³ , 30 mg/nm ³
(6.)	Hot Air generator (5 lakh Kcal/Hr)	Coal 3 TPD	21	0.375	Others	PM, SO ₂ , NO _x	80 mg/Nm ³ , 40 mg/nm ³ , 30 mg/nm ³
(7.)	D G set (500 KVA)	Diesel - 100 liter/hr	11	0.300	Others	PM, SO ₂ , NO _x	60 mg/nm ³ , 40 mg/nm ³ , 40 mg/nm ³

(8.)	Spray Dryer	--	15	0.450	Others	PM	35 mg/Nm3
(9.)	Reaction vessel of chloranil	--	11	0.225	Others	HCl	15 mg/nm3

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 500
 (b)Source UGVCL
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) 500 KVA
 (e)Stack Height (in m) 11

Land Ownership Pattern:

- (a)Forest Land 00
 (b)Private Land 0.5662
 20. (c)Government Land 00
 (d)Revenue Land 00
 (e)Other Land 00
Total Land 0.5662

Present Land Use Breakup of the Study Area in Ha:

- (a)Agriculture Area 0.025458
 (b)Waste/Barren Land 0.001645
 (c)Grazing/ Community Land 00
 (d)Surface Water Bodies 0.000444
 (e)Settlements 00
 21. (f)Industrial 0.001709
 (g)Forest 00
 (h)Mangroves 00
 (i)Marine Area 00
 (j)Others : Public utilities & Facility, Rural, Transportation 0.002216
Total 0.031472

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Main Plant		0.1000	
(2.)	Green belt		0.1870	

(3.)	Others	Road, parking	0.1192	Road, parking	
(4.)	Built Up Area		0.1600	Admin + Lab, Storage area, ETP, Utility area	
Total			0.5662		
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Corridors	None within 10 Km	00	None within 10 Km	
(2.)	Critically Polluted Area	None within 10 Km	00	None within 10 Km	
(3.)	NPA	None within 10 Km	00	None within 10 Km	
(4.)	ESAs	None within 10 Km	00	None within 10 Km	
(5.)	ESZs	None within 10 Km	00	None within 10 Km	
(6.)	WLS	None within 10 Km	00	None within 10 Km	
(7.)	Wildlife Corridors	None within 10 Km	00	None within 10 Km	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		None within 10 Km	00	None within 10 Km
(2.)	Archaeological Sites		None within 10 Km	00	None within 10 Km
(3.)	Defence Installations		None within 10	00	None within 10

			Km		Km
--	--	--	----	--	----

(a)Whether Noc / Permission from the competent authority is required? No

23.3. (b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 00

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0.5662

(b)Land yet to be acquired(Ha) 00

(c)Status of Land acquisition if not acquired Already acquired

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 00

(b)No. of Households 00

(c)No. of PDFs (Project Displaced Families) 00

(d)No. of PAFs (Project Affected Families) 00

(e)Funds Allocated for R&R(in Rs) 00

(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? No

(b)Whether conservation plan for Schedule-I Species has been prepared ? No

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? Yes

	(i)Details of Water Bodies in Core Area	Village of chandarad village
	(b)Whether there is Diversion Required ?	No
	(c)Whether permission has been obtained from competent authority ?	No
	<u>Details of Presence of Water Bodies in Buffer Area:</u>	
	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes
30.	(i)Details of Water Bodies in Buffer Area	Narmada Canal
	(ii)Direction of Water Bodies in Buffer Area	West
	(iii)Distance of Water Bodies in Buffer Area	9
	<u>Manpower Requirement:</u>	
	(a)Permanent Employment-During Construction	00
	(b)Permanent Employment-During Operation	100
31.	(c)Temporary Employment- During Construction	00
	(d)Temporary Employment- During Operation	00
	(e)No. of working days	26
	(f)Total Manpower	100
	<u>Green Belt in Ha:</u>	
	(a)Total Area of Green Belt	1870
32.	(b)Percentage of Total Project Area	330271.99
	(c)No. of Plants to be Planted	470
	(d)Funds Allocated for Plantation	5.0
33.	<u>Project Benefits</u>	
S. No.	Type of Project Benefits	Details of Project Benefits
NIL		
34.	CRZ Specific Details : Not Applicable	
35.	Sector Specific Details : NOT APPLICABLE	

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA0084
- (ii) Name of the EIA Consultant San Envirotech Pvt. Ltd., Ahmedabad
- (iii) Address 401/402/423/424/324, Medicine Market, Opp. Shefali Centre, Paldi cross Road, Ahmedabad
- (iv) Mobile No. 9825007201
- (v) Landline No. 0792658307
- (vi) Email Id mahendra.sepl@gmail.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 23 Dec 2019

13.5.3.2 The EAC, after presentation noted the following:

- Standard Terms of Reference for the project was issued on 4th February, 2019. Public hearing for the project has been conducted by the Gujarat Pollution Control Board on 21st August, 2019. The main issues raised during public hearing are related to local employment, greenbelt development, women empowerment, etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site.
- Total water requirement is estimated to be 178 cum/day, which includes fresh water requirement of 103 cum/day proposed to be met from Bore well. Application in this regard has been submitted to the ground water department.
- Process effluent from dye intermediate plant (48 cum/day) shall be taken into ETP-1 after segregation of spent Sulphuric acid stream, and sent to Common Spray Drying facility for evaporation operated by M/s Chhatral Environment Management System Pvt Ltd. Effluent from dyes plant, scrubber, washing & utilities (77cum/day) shall be taken in to ETP-2, and passed through RO. RO permeate (60 cum/day) shall be reused; RO reject (17 cum/day) shall be Spray Dried along with effluent of ETP-1 (48 KLD) in common evaporation facility operated by M/s Chhatral Environment Management System Pvt Ltd.
- It was informed that the effluent shall be sent to M/s Chhatral Environment Management System Pvt Ltd through tankers, which was not agreed upon by the Committee, and insisted for treatment and reuse of water in the plant/process itself.

- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been properly addressed by the project proponent.

13.5.3.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-*

A. Specific Conditions:-

- i. *Briquette/Gas shall be used as fuel in the boiler in place of coal*
- ii. *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used*
 - a. *Solvent management shall be carried out as follows:*
 - b. *Reactor shall be connected to chilled brine condenser system.*
 - c. *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - d. *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - e. *Solvents shall be stored in a separate space specified with all safety measures.*
 - f. *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - g. *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - h. *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation*
- iii. *All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented*

B. General Conditions:-

I. Statutory compliance

- i. *The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- ii. *The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- iii. *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989*

II. Air quality monitoring and preservation

- viii. *The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.*
- ix. *The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.*
- x. *The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.*

- xi. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- xii. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- xiii. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- xiv. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- vii. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- viii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- ix. Total fresh water requirement shall not exceed 103 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- x. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- xi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- xii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- iv. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- v. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- vi. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- ii. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- iv. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- v. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- vi. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.

- f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- ii. The green belt of at least 4-5m width (two rows) shall be developed in nearly 35% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least Rs. 25 lakhs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. *The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.*
- iii. *The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.*
- iv. *The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.*
- v. *The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.*
- vi. *The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*
- vii. *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
- viii. *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
- ix. *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- x. *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- xi. *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- xii. *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- xiii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiv. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.13.5.4

Synthetic organic chemical project at Survey No.: 403 Paiki 2, 403 Paiki 3 Paiki, Village: Nava Sadulka, Haripar- Kerala Road, Taluka & District: Morbi, Morbi, Gujarat by M/s Silvano Industries LLP - Environmental Clearance

13.5.4: The proposal is for environmental clearance for the Proposed Synthetic organic chemical project at Survey No.: 403 Paiki 2, 403 Paiki 3 Paiki, Village: Nava Sadulka, Haripar-Kerala Road, Taluka & District: Morbi, Morbi, Gujarat by M/s Silvano Industries LLP. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a) Name of the project(s)	Silvano Industries LLP
	(b) Name of the Company / Organisation	SILVANO INDUSTRIES LLP
1.	(c) Registered Address	Survey No.: 403 paiki 2, 403 paiki 3 paiki, Village: Nava Sadulka, Haripar- Kerala Road, Taluka & District: Morbi, Morbi, Gujarat-363642
	(d) Legal Status of the Company	Others
	(e) Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a) Name of the Applicant	Bharatbhai Vaghajibhai Panchotia
	(b) Designation (Owner/ Partner/ CEO)	partner
2.	(c) Address	Survey No. 403 paiki 2, 403 paiki 3 paiki, village Nava Sadulka, Taluka Morbi, District Morbi,, Morbi, Morbi, Gujarat-363642
	(d) Pin code	363642
	<u>Category of the Project/Activity as per Schedule of EIA Notification, 2006:</u>	
	(a) Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b) Category	A
3.	(c) Proposal Number	IA/GJ/IND2/89821/2018
	(d) Master Proposal Number (Single Window)	SW/109646/2019
	(e) EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f) Project Type	New Project
	<u>Location of the Project:</u>	
	(a) Plot/Survey/Khasra No.	Survey No.: 403 paiki 2, 403 paiki 3 paiki,
4.	(b) Pincode	363642
	(c) Bounded Latitudes (North)	FROM 70.8336 To 70.83384
	(d) Bounded Longitudes (East)	FROM 22.92925 To 22.92965

(e)Survey of India Topo Sheet No. F42E16

5. (a)Number of States in which Project will be Executed 1
(b)Main State of the project Gujarat

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Morbi	Morbi	Nava Sadulka

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/420/2018-IA-II(I)
6. (b)Date of Apply of TOR 27 Dec 2018
(c)Date of Issue of TOR / Standard ToR 04 Feb 2019

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
(b)Whether details of Public Hearing available? Yes
(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertising : 05 May 2019	Date : 07 Jun 2019 Distance of Public Hearing : 0	Survey No.: 403 paiki 2, 403 paiki 3 paiki, Village: Nava	State : Gujarat District : Morbi Tehsil : Morbi Village : Nava Sadulka	97	Most of welcoming the proposed project.	Additional District Magistrate & Additional District Collector

		Venue from the Proposed Project :	Sadul ka, Harip ar “ Keral a Road, Taluk a: Morbi, Distric t: Morbi, Gujar at - 36364 2					
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8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Electric Panel	For Electric Panel	
(2.)	Boiler Room	To place Boiler	
(3.)	Storage Area	Liquid raw material Storage Area	
(4.)	Packing and storage Area	For Packaging and Product Storage Area	
(5.)	Office Area	For Office Work	
(6.)	S.H.W	For Solid/ Hazardous Waste Storage	
(7.)	Water Storage/ OH Tank /RO Plant	For Water Storage	
(8.)	Cooling Tower	Cooling Tower	
(9.)	Main Plant	Manufacturing Area	
(10.)	Storage Area	Solid raw material Storage Area	
(11.)	Labor Quarters	Labor Quarters	
(12.)	E.T.P.	For Effluent Treatment	

8.2. Product

S.	Product/Activity	Quantity	Unit	Other Unit	Mode of	Other Mode
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No.	(Capacity/Area)				Transport / Transmission of Product	of Transport / Transmission of Product
(1.)	Ceramic Binders	1500	Others	MT/Month	Road,Rail	
(2.)	Wood type Adhesives	1875	Others	MT/Month	Road,Rail	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Project Cost:

(a) Total Cost of the Project at current price level (in Crores) 2.8

(b) Funds Allocated for Environment Management (Capital) (in Crores) 0.25

10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.056

(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 0.065

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification?** No

12. **Whether project attract the Specific Condition specified in the Schedule of EIA Notification?** No

Raw Material / Fuel Requirement:

(a) Proposed quantity of raw material/fuel 1365.22

13. (b) Existing quantity of raw material/fuel N/A

(c) Total quantity of raw material/fuel 1365.22

13.1. Raw Material / Fuel Profile

S. No	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transp	Distance of Sourc	Type of Linka		
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						ort		e from Proje ct Site (in Km)	ge		
(1.)	Acrylic acid	72	Oth ers	MT/Mo nth	local traders/sup pliers	Road, Rail		10	Open Mark et		
(2.)	Caustic Flakes	48	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(3.)	Sodium bisulphite	1.2	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(4.)	Vinyl acetate monomer	862.5	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(5.)	Sodium Bicarbonate	1.8	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(6.)	Octanol	9.1	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(7.)	Di Butyl Pthalate	24.5	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(8.)	Formalin	3.7	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(9.)	Acrylamide Solution	188	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(10.)	Potassium per sulphate	2.6	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(11.)	N,N' Methylenebisacr ylamide	0.5	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		
(12.)	Sodium Hypophosphite	1.2	Oth ers	MT/Mo nth	local draders/sup pliers	Road		10	Open Mark et		

(13.)	Polyazo Azim	0.12	Others	MT/Month	local draders/suppliers	Road	10	Open Market		
(14.)	Poly Vinyl Alcohol	150	Others	MT/Month	local draders/suppliers	Road	10	Open Market		
(15.)	HSD Fuel	3.53	Others	MT/Day	local draders/suppliers	Road, Rail	10	Open Market		

Baseline Data :

14. (a)Period of Base Line Data Collection FROM 13 Oct 2018 To 03 Jan 2019
(b)Season Winter

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	80.23	42.10	79.9	100
(2.)	NOx	Micro Gram per Meter Cube	29.58	8.37	29.40	80
(3.)	SO2	Micro Gram per Meter Cube	18.67	6.21	18.49	80
(4.)	PM2.5	Micro Gram per Meter Cube	52.99	26.00	52.76	60

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	Others	EC		Others	micro sm/ cm	14065	359	00	00
(2.)	TDS			mg/l		9564	244	2000	2000
(3.)	Others	TS		mg/l		9684	256	00	00
(4.)	TSS			mg/l		48204	12	00	00
(5.)	Others	Sulphate		mg/l		398.1	4.5	400	400
(6.)	Others	Bicarbonate		mg/l		900	6	600	600

(7.)	Others	Iron		mg/l		1	1	1	1
(8.)	Others	Nitrate		mg/l		7.6	2.1	45	45
(9.)	Others	Copper		mg/l		0.02	0.02	1.5	1.5
(10.)	Others	COD		mg/l		407	8	00	00
(11.)	Others	Fecal Coliform		Others	MPN/100ml	2	2	00	00
(12.)	Others	Iron		mg/l		0.2	0.2	0.3	0.3
(13.)	Others	Sodium		mg/l		199	18	00	00
(14.)	Others	BOD		mg/l		122	2.3	00	00
(15.)	pH			NA		8.26	6.78	6.5	8.5
(16.)	Others	EC		Others	micro sm/ cm	14065	359	00	00
(17.)	Others	DO		mg/l		5.9	4.4	00	00
(18.)	Chlorides			mg/l		2595.5	55.8	1000	1000
(19.)	Others	Mg Hardness		mg/l		240	50	00	00
(20.)	Others	Magnesium		mg/l		678.7	18.3	100	100
(21.)	Others	Alkalinity		mg/l		900	6	600	600
(22.)	Fluoride			mg/l		2.98	0.2	1.5	1.5
(23.)	Others	Potassium		mg/l		87	5	00	00
(24.)	Others	Total Coliform		Others	MPN/100 ml	2	2	00	00
(25.)	Others	Residual Chloride		mg/l		15.9	2.2	1	1
(26.)	Others	Ca Hardness		mg/l		1287	20	00	00

(27 .)	Others	Colour		Others	Hazen	5	5	15	15
(28 .)	Others	Calcium		mg/l		300.6	7.9	200	200
(29 .)	Others	Odour		NA		00	00	00	00
(30 .)	Others	Nitrite		mg/l		1.1	1	00	00
(31 .)	Others	Turbidity		Others	NTU	6.7	1.8	5	5
(32 .)	Total Hardness			mg/l		4080	100	600	600
(33 .)	Others	Phosphorous		mg/l		1.34	1	1	1
(34 .)	Others	Temperature		Others	Degree Celcius	25.9	24.3	00	00
(35 .)	Others	Carbonate		mg/l		5	5	5	5
(36 .)	Others	Phosphate		mg/l		4.02	1	00	00
(37 .)	Others	Phenol		mg/l		0.021	0.01	0.002	0.002

14.3. No. of Surface Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	DO		mg/l		4.8	2.9	E
(2.)	BOD		mg/l		101.7	12	E
(3.)	COD		mg/l		339	40	E
(4.)	pH		NA		8.66	7.89	C

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	47.9	40.8	45
(2.)	Leq(Day)	A-weighted	64.8	53.8	55

		decibels(dB(A))						
14.5. No. of Soil Sample Monitored locations : 8								
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value			
(1.)	pH			8.71	7.91			
(2.)	N(Nitrogen)	Percent		17.2	10.58			
(3.)	K(Potassium)	Milligram per Kilogram		4.99	0.98			
(4.)	Electric Conductivity	Millisiemens per Centimetre		1087	2.62			
(5.)	P(Phosphorus)	Milligram per Kilogram		7.74	1.32			
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 13.65 To 2.36</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 12.38 To 3.51</p> <p>(c)Whether Ground Water Intersection will be there ? No</p>								
15. Details of Water Requirement (During Operation)								
S. No.	Source	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Ground Water	154.35	0.1	Pipeline	Tube Well	21-4/4860/GJ/IND/2019	09 Mar 2019	154.35
<p>15.1. (a)Whether Desalination is proposed No</p>								
16. Waste Water Management(During Operation)								
S. No.	Type/Source	Quantity of Waste Water Generated	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/R	Quantity of Discharged Water

		ted (KLD)					euse (KLD)	(KLD)
1	Domestic	3.5	3.5	Septic tank followed by Soak pit system	Others	Soak pit	3.5	0.0
2	Industrial	9.0	9.0	ETP + Evaporator + Condenser	Reuse within the Plant & Recycling		9.0	

(a)Total Waste Water Generation 12.5
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 12.5

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal
(1.)	ETP Sludge + Evaporation residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	60	Tons	51.165	Road	Treatment, Storage and Disposal Facility(TSDF)
(2.)	Discarded Bags and Drums	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	0.8	Tons	10	Road	Authorized Recyclers
(3.)	Used Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	0.5	Tons	0.0	Road	Authorized Recyclers

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
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(1.)	PM10	Microgram per Meter Cube	80.23	0.0	0.00025	80.24	100
(2.)	SO2	Microgram per Meter Cube	18.67	8.66	0.08	18.8	80
(3.)	NOx	Microgram per Meter Cube	29.58	00	0.0002	29.6	80
(4.)	PM2.5	Microgram per Meter Cube	80.23	0.0	0.00025	80.24	100

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Emission (GLS)
(1.)	Steam boiler	HSD	11	1	SO2	0.2042 g/s
(2.)	Steam boiler	HSD	11	1	NOx	0.0028 g/s
(3.)	Steam boiler	HSD	11	1	PM10	0.00204 g/s

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 100
(b)Source PGVCL
19. (c)Uploaded Copy of Agreement Copy of Agreement submitted
(d)Standby Arrangement (Details of DG Sets) 125 KVA
(e)Stack Height (in m) 6

Land Ownership Pattern:

- (a)Forest Land 0.0
(b)Private Land 1.7806
20. (c)Government Land 0.0
(d)Revenue Land 0.0
(e)Other Land 0.0
Total Land 1.7806

Present Land Use Breakup of the Study Area in Ha:

	(a)Agriculture Area	29512
	(b)Waste/Barren Land	0
	(c)Grazing/ Community Land	0
	(d)Surface Water Bodies	1262
21.	(e)Settlements	451
	(f)Industrial	88
	(g)Forest	0
	(h)Mangroves	0
	(i)Marine Area	0
	(j)Others : Transportation	104
	Total	31417

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Green belt		0.5875	
(2.)	Built Up Area		0.5954	
(3.)	Others	Open area	0.5977	

Total 1.7806

23. Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :

23.1. Details of Ecological Sensitivity :

S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Critically Polluted Area	NA	0	0
(2.)	WLS	NA	00	NA
(3.)	ESZs	NA	00	NA
(4.)	Corridors	NA	00	NA
(5.)	Wildlife Corridors	NA	00	NA
(6.)	NPA	NA	00	NA

(7.)	ESAs	NA	00	NA	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Archaeological Sites		NA	00	NA
(2.)	Forest		NA	00	NA
(3.)	Defence Installations		NA	00	NA
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>(a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p><u>Land Acquisition Status:</u></p> <p>(a)Acquired Land(Ha) 1.7806</p> <p>26. (b)Land yet to be acquired(Ha) 0.0</p> <p>(c)Status of Land acquisition if not acquired 0.0</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>(a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced Families) 0</p> <p>27. (d)No. of PAFs (Project Affected Families) 0</p> <p>(e)Funds Allocated for R&R(in Rs) 0</p> <p>(f)Status of R&R Completed</p> <p>28. <u>Details of Presence of Schedule-I Species:</u></p>					

	(a)Whether there is Presence of Schedule-I Species?	Yes
	(i)Details of Schedule-I Species	peacock
	(b)Whether conservation plan for Schedule-I Species has been prepared ?	Yes
	(i)Uploaded copy of conservation plan	Copy of conservation plan submitted
	(ii)Fund Provision made	1 lac
	(iii)Period of Implementation	5 year
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	No
	<u>Details of Presence of Water Bodies in Core Area:</u>	
	(a)Whether there is Presence of Water Bodies in Core Area ?	Yes
29.	(i)Details of Water Bodies in Core Area	canal
	(b)Whether there is Diversion Required?	No
	(c)Whether permission has been obtained from competent authority?	No
	<u>Details of Presence of Water Bodies in Buffer Area:</u>	
	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes
30.	(i)Details of Water Bodies in Buffer Area	macchu river
	(ii)Direction of Water Bodies in Buffer Area	West
	(iii)Distance of Water Bodies in Buffer Area	4.7
	<u>Manpower Requirement:</u>	
	(a)Permanent Employment-During Construction	0
	(b)Permanent Employment-During Operation	10
31.	(c)Temporary Employment- During Construction	20
	(d)Temporary Employment- During Operation	0
	(e)No. of working days	25
	(f)Total Manpower	30

<u>Green Belt in Ha:</u> (a)Total Area of Green Belt 0.5875 32. (b)Percentage of Total Project Area 32.99 (c)No. of Plants to be Planted 450 (d)Funds Allocated for Plantation 100000		
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Increase employment in surrounding villages due o proposed project.
34. CRZ Specific Details : Not Applicable 35. Sector Specific Details : NOT APPLICABLE 35. Sector Specific Details For Industrial Projects - 2		
S. No.	Item	Details
S. No.	Item	Details
<u>Details of Court Cases:</u> (a)Whether there is any Court 36. Cases pending against the project and/or land in which the project is proposed to be set up ? No		
<u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u> 37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No		
<u>Details of EIA Consultant:</u> (a)Have you hired Consultant for preparing document? Yes (i)Accreditation No. NABET/EIA/1619/RA0033 (ii)Name of the EIA Consultant T R Associates 38. (iii)Address A-401, S. G. Business Hub,, Between Sola Bhagwat and Gota Overbridge, (iv)Mobile No. 9825371099 (v)Landline No. 0792745069 (vi)Email Id adm.trassociates@gmail.com (vii)Category of Accreditation A		

13.5.4.2 The EAC after presentation noted the following

- Standard Terms of Reference for the project was issued on 4th February, 2019. Public hearing for the project has been conducted by the State Pollution Control Board on 7th June, 2019. The main issues raised public hearing are related to employment, land value, facility to employees etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. However, schedule-I species such as peacock is present in the study area and PP has prepared conservation plan with a budget provision of Rs. 1 lakh.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing has been properly addressed by the project proponent.

13.5.4.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-*

A. Specific Conditions:

i. Solvent management shall be carried out as follows:

- (a) Reactor shall be connected to chilled brine condenser system.*
- (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
- (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
- (d) Solvents shall be stored in a separate space specified with all safety measures.*
- (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
- (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
- (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*

B. General Conditions:

I. Statutory compliance

- i. The project proponent shall prepare a Site-Specific Conservation Plan for conservation of peacocks in the study area and obtain approval from the State Forest Department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report.*
- ii. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- iii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- iv. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989*

II. Air quality monitoring and preservation

- i. The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with
- III. Water quality monitoring and preservation
 - i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises
 - ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
 - iii. *Total fresh water requirement shall not exceed 154 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
 - iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
 - v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
 - vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- IV. Noise monitoring and prevention
 - i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
 - ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
 - iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time
- V. Energy Conservation measures
 - i. The energy sources for lighting purposes shall preferably be LED based.
- VI. Waste management
 - i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation
- VII. Green Belt
 - i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- VIII. Safety, Public hearing and Human health issues
 - i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
 - ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
 - iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
 - iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
 - v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places
- IX. Corporate Environment Responsibility
 - i. At least Rs. 10 lakhs shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office
 - ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise

progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders

passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No.13.5.5

Pesticides and Pesticide Intermediates manufacturing unit (Total Production – 2500 MTPM) at Plot No. D3/1, GIDC Estate, Dahej, Tehsil: Vagra, District: Bharuch, Gujarat by M/s Insecticides India Limited (Unit-II) - Environmental Clearance

[IA/GJ/IND2/75306/2018, IA-J-11011/192/2018-IA-II(I)]

13.5.5.1: The proposal is for environmental clearance for the proposed Pesticides and Pesticide Intermediates manufacturing unit (Total Production – 2500 MTPM) at Plot No. D3/1, GIDC Estate, Dahej, Tehsil: Vagra, District: Bharuch, Gujarat by M/s Insecticides India Limited (Unit-II). The project activity covered under item 5(b) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Insecticides India Limited (Unit-II)
	(b)Name of the Company / Organisation	INSECTICIDES INDIA LIMITED (UNIT- II)
1.	(c)Registered Address	Plot No. D3/1, Dahej GIDC estate, Village: Dahej, Ta.: Vagra, Dist. : Bharuch,Bharuch,Gujarat-392130
	(d)Legal Status of the Company	Others
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Rajesh Aggarwal
	(b)Designation (Owner/ Partner/ CEO)	MD
2.	(c)Address	Plot No. D3/1, Dahej GIDC Estate, Village - Dahej, Ta-Vagra, Bharuch,,Vagra,Bharuch,Gujarat-392130
	(d)Pin code	392130
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
3.	(b)Category	A
	(c)Proposal Number	IA/GJ/IND2/75306/2018
	(d)Master Proposal Number(Single Window)	SW/116010/2019
	(e)EAC concerned (for category A	Industrial Projects - 2

Projects only)

(f)Project Type

New Project

Location of the Project:

4. (a)Plot/Survey/Khasra No. Plot No. D3/1, GIDC Estate, Dahej, Tehsil: Vagra,
(b)Pincode 392130
(c)Bounded Latitudes (North) FROM 21.72416 To 21.72722
(d)Bounded Longitudes (East) FROM 72.60250 To 72.60611
(e)Survey of India Topo Sheet No. F43M10
5. (a)Number of States in which Project will be Executed 1
(b)Main State of the project Gujarat

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Bharuch	Vagra	Dahej

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/192/2018-IA-II(I)
6. (b)Date of Apply of TOR 05 Jun 2018
(c)Date of Issue of TOR / Standard ToR 09 Jul 2018

Details of Public Consultation:

7. (a)Whether the Project Exempted from Public Hearing? Yes
(b)Reason Public Hearing is exempted as the project located in notified Industrial area

8. **Details of Project Configuration/Product:**

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	SS-316 Reactor	15 KL	2 nos.
(2.)	SS-316 Heat exchangers	5 sqm	19 nos.
(3.)	Graphite Heat exchangers	20 sqm	10 nos.
(4.)	SS-316 FBD	200 Kg	1 nos.

(5.)	SS-316 Sparkler filter	1.5 sqm	3 nos.
(6.)	SS-316 Centrifugal pump	5 m ³ /hr	14 nos.
(7.)	AODD pump, PP	2 m ³ /hr	2 nos.
(8.)	Stage Vac. System with 2 steam + 1 water jet	4 torr	5 nos.
(9.)	MS Storage tank	25 KL	6 nos.
(10.)	CS centrifugal pump	5 m ³ /hr	6 nos.
(11.)	HCl Scrubber	100 kg/hr	1 nos.
(12.)	HBr Scrubber	100 kg/hr.	1 nos.
(13.)	Vent gas scrubber	500 CFM	2 nos.
(14.)	Material Lift	2 Tons	2 nos.
(15.)	Boiler	8 T/hr	2 nos.
(16.)	Chilled brine plant with pumps	100 TR	2 nos.
(17.)	Boiler Feed Water softener plant	15 TPH	1 nos.
(18.)	RO	7.5 m ³ /hr	1 nos.
(19.)	MS Glass Lined Reactor	3 KL	3 Nos.
(20.)	PP Centrifugal pump	5 m ³ /hr.	6 nos.
(21.)	D.G. set	1000 KVA	1 nos.
(22.)	RO	25 m ³ /hr	1 nos.
(23.)	SS-316 Reactor	3 KL	2 Nos.
(24.)	SS-316 Falling film evaporator	8 sqm	2 nos.
(25.)	SS-316 Heat exchangers	25 sqm	2 nos.
(26.)	SS-316 Heat exchangers	20 sqm	5 nos.
(27.)	SS-316 Receiver	3 KL	8 nos.
(28.)	SS-316 Heat exchangers	15 sqm	10 nos.
(29.)	SS-316 Agitated Nutsch Filter	2 KL	8 nos
(30.)	CS centrifugal pump	5 m ³ /hr.	14 nos.
(31.)	SS-316 Receiver	1 KL	6 nos.
(32.)	SS-316 Receiver	2 KL	6 nos.
(33.)	SS-316 Receiver	4 KL	2 nos.
(34.)	MSGL Receiver	1 KL	9 nos.

(35.)	PP Centrifugal pump	5 m3/hr.	8 nos.
(36.)	HDPE Storage tank	10 KL	6 nos.
(37.)	PP Centrifugal pump	5 m3/hr.	3 nos.
(38.)	PP Centrifugal pump	25 m3/hr.	2 nos.
(39.)	SS-316 Centrifuge	48"	2 nos.
(40.)	Cooling tower with pumps	750 TR	2 nos.
(41.)	Chilled Water Plant with pumps	150 TR	2 nos.
(42.)	Nitrogen Plant	200 m3/hr	1 nos.
(43.)	Compressed Air	100 m3/hr	1 nos.
(44.)	MEE	12.5 m ³ /hr.	1 nos.
(45.)	ETP	400 KL, 125 KL	1 nos.
(46.)	SS-316 Reactor	6.3 KL	10 nos.
(47.)	SS-316 Reactor	10 KL	3 nos.
(48.)	SS-316 Heat exchangers	10 sqm	2 nos.
(49.)	SS-316 Agitated Nutsch filter dryer	5 KL	1 nos.
(50.)	SS-316 Rotary vacuum dryer	4 KL	2 nos.
(51.)	2 Stage Vac. System with 1 steam + 1 water jet	10 torr	13 nos.
(52.)	TFH	10 lac K Cal/hr	1 nos.
(53.)	Cooling tower with pumps for CHW & CHBR	350 TR	1 nos.
(54.)	MS Glass Lined Reactor	6.3 KL	4 Nos.
(55.)	SS-316 Reactor	1.5 KL	2 nos.
(56.)	SS-316 Distillation Column	500 mm dia x 10000 mm height	4 nos.

8.2. Product

S. N o.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport of Product
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(1.)	Herbicides(Bispyribac sodium, Diuron, Glufosinate ammonium, Pyribenzoxim, Cyhalofop-butyl, Clordinafop-propargyl, Cloquintocet-mexyl, Tembotrione, Pinoxaden, Penoxsulam, Chlorimuron-ethyl, Fomesafe	625	MT/Month	Road	
(2.)	Insecticides(Diafenthiuron,Thiocyclam oxalate,Dinotefuran,Pymetrozine,Chloranthraniliprole,Cy antraniliprole,Ethiprole, Flubendiamide,Flonicamid,Spirotetramat,Cyenopyrafen,P rofenofos,Thiamethoxam, Fen	625	MT/Month	Road	
(3.)	Intermediate Chemicals(Lambda acid,Bifenthrin alcohol,3-Methyl-4-nitroimino perhydro 1,3,5-oxadiazine (MNIO),2-(Nitroimino) Imidazolidine (NII),2-Chloro-5-(Chloromethyl) Thiazole (CCMT),Phenyl 4,6-dim	1000	MT/Month	Road	
(4.)	Fungicides (Pyraclostrobin, Kresoxim methyl, Trifloxystrobin, Cyazofamid, Dimethomorph, Boscalid, Metrafenone, Carbendazim, Myclobutanil,Copper Oxychloride, Cuprus chloride,Cuprous oxide,Azoxystrobin)	250	MT/Month	Road	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):**

Details Not Applicable

Details of Consent to Operate

- (i)Whether Consent to operate obtained ? NA
- (ii)Copies of all Consent to operate obtained since inception NA
- 9.1. (iii)Date of Issue 28 Aug 2019
- (iv)Valid Upto 28 Aug 2019
- (v)File No. NOT APPLICABLE
- (vi)Application No. NOT APPLICABLE
- (vii)Copy of Consent to operate valid as on date NA

Project Cost:

- (a)Total Cost of the Project at current price level (in Crores) 40
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 3.50
- (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.80

	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	5.4					
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No					
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No					
<u>Raw Material / Fuel Requirement:</u>							
	(a) Proposed quantity of raw material/fuel	54600					
13.	(b) Existing quantity of raw material/fuel	N/A					
	(c) Total quantity of raw material/fuel	54600					
13.1. Raw Material / Fuel Profile							
S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage
(1.)	As per attached sheet	54600	Tons per Annum	Local Market	Road, Rail	50	Open Market
<u>Baseline Data :</u>							
14.	(a) Period of Base Line Data Collection	FROM 01 Mar 2019 To 31 May 2019					
	(b) Season	Summer					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 08							
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM2.5		Micro Gram per Meter	45.6	28.3	40.74	60

			Cube				
(2.)	SO ₂		Micro Gram per Meter Cube	24.3	11.3	20.99	80
(3.)	NO _x		Micro Gram per Meter Cube	32.6	14.2	24.79	80
(4.)	PM ₁₀		Micro Gram per Meter Cube	86.2	58.8	78.59	100

14.2. No. of Ground Water monitoring locations : 08

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	Fluoride			mg/l		0.81	0.50	1.0	1.5
(2.)	Chlorides			mg/l		1507	1068	250	1000
(3.)	Total Hardness			mg/l		755	610	300	600
(4.)	pH			Others	pH Unit	7.67	7.19	8.5	8.5
(5.)	Heavy Metals		Iron	mg/l		0.41	0.21	0.3	1
(6.)	TSS			mg/l		10	5	0	0
(7.)	TDS			mg/l		2975	2339	500	2000

14.3. No. of Surface Water monitoring locations : 04

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	BOD		mg/l		10	5	A

(2.)	DO		mg/l		5.1	4	A
(3.)	pH		Others	pH Unit	8.07	7.79	A
(4.)	COD		mg/l		20	5	A

14.4. No. of Ambient Noise monitoring locations : 09

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	53.2	39.3	70
(2.)	Leq(Day)	A-weighted decibels(dB(A))	57	49.7	75

14.5. No. of Soil Sample Monitored locations : 08

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	pH	Others	pH unit	8.17	7.55
(2.)	N(Nitrogen)	Milligram per Kilogram		161	118
(3.)	P(Phosphorus)	Milligram per Kilogram		89	65
(4.)	Electric Conductivity	Millisiemens per Centimetre		1.52	1.44
(5.)	K(Potassium)	Milligram per Kilogram		159	82

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 20

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 5 To 8

(c)Whether Ground Water Intersection will be there? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Copy of Permission from	Mode of Transport	Method of Water Withd rawal	Other Method of Water Withd	Letter No.	Date of Issue	Permitted Quantity
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					Comp etent Autho rity			rawal			
(1 .)	Oth ers	GID C Wat er	253	2	Not Applia ble	Pipeli ne	Others	GIDC water supply	GIDC/DM/C G/ALT/1912	18 No v 20 14	253

15.1. (a) Whether Desalination is proposed No

16. Waste Water Management (During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	Industrial	503	550	ETP-RO-MEE	Reuse within the Plant & Recycling, Others	ZLD	497	6
(2.)	Domestic	12	20	STP	Green Belt Renewal Plant		12	

(a) Total Waste Water Generation 515
16.1. (b) Total Discharged Water 6
(c) Total Reused Water 509

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site (KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	ETP Sludge	Hazardous Waste (as per		900	Tons	50	Road		Treatment, Storage and Disposal	

		Hazardous and Other Waste Management rules 2016)							Facility(T SDF)	
(2 .)	MEE Salt	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		1380	Tons	50	Road		Treatment, Storage and Disposal Facility(T SDF)	
(3 .)	Discarded Container	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		30000	Tons	25	Road		Authorized Recyclers	
(4 .)	Process Waste	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		1200	Tons	25	Road		Treatment, Storage and Disposal Facility(T SDF)	
(5 .)	Discarded Liners	Hazardous Waste (as per		18	Tons	25	Road		Authorized Recyclers	

		Hazardous and Other Waste Management rules 2016)								
(6.)	Distillation residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		3300	Tons	25	Road		Co-Processing	
(7.)	Used Lubricating oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		1.0	Kilolitre	25	Road		Authorized Recyclers	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10		Microgram per Meter Cube	72.18	2.0	1.697	73.88	100
(2.)	NOx		Microgram per Meter	21.09	2.0	0.844	21.935	80

			Cube					
(3.)	PM2.5		Microgram per Meter Cube	35.81	2.0	1.697	37.5 1	60
(4.)	SO2		Microgram per Meter Cube	17.44	1.0	2.081	19.5 22	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Thermic Fluid Heater (10 Lakhs Kcal/Hr)	Furnace Oil	21	0.375	Others	SPM, SO2, NOx	75 mg/Nm3, 40 mg/Nm3, 35 mg/nm3
(2.)	Boiler (8 TPH)- 2 Nos.	Furnace Oil	41	0.540	Others	SPM, SO2, NOx	75 mg/Nm3, 40 mg/Nm3, 35 mg/Nm3
(3.)	Reaction / Process Vessels (3 sets)	--	15	0.300	Others	HCl	15 mg/Nm3
(4.)	D G Set (1000 KVA)	Diesel	11	0.300	Others	SPM, SO2, NOx	65 mg/Nm3, 30 mg/Nm3, 40 mg/Nm3
(5.)	Reaction / Process vessel (5 sets)	--	15	0.300	Others	HCl, SO2	15 mg/Nm3, 30 mg/Nm3

19. Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA))	1500
(b)Source	DGVCL
(c)Uploaded Copy of Agreement	Not Applicable
(d)Standby Arrangement (Details of DG Sets)	1000 KVA
(e)Stack Height (in m)	11

Land Ownership Pattern:

(a)Forest Land	00
(b)Private Land	5.2
20. (c)Government Land	00
(d)Revenue Land	0
(e)Other Land	0
Total Land	5.2

Present Land Use Breakup of the Study Area in Ha:

(a)Agriculture Area	0.00898
(b)Waste/Barren Land	0.00403
(c)Grazing/ Community Land	00
(d)Surface Water Bodies	0.00935
(e)Settlements	00
21. (f)Industrial	0.00331
(g)Forest	00
(h)Mangroves	00
(i)Marine Area	00
(j)Others : Mining, Mixed Urban, Public Utilities & Facility,	0.00575
Total	0.031420000000000003

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Main Plant		0.7725	Process plant 1 & 2
(2.)	Green belt		1.7160	
(3.)	Built Up Area		1.7615	admin bldg., ETP area, RM & FG ware house, etc.
(4.)	Others	Internal Road, parking & margin	0.9500	
Total			5.2	

Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Critically Polluted Area	None within 10 Km	00	None within 10 Km	
(2.)	Wildlife Corridors	None within 10 Km	00	None within 10 Km	
(3.)	WLS	None within 10 Km	00	None within 10 Km	
(4.)	ESAs	None within 10 Km	00	None within 10 Km	
(5.)	ESZs	None within 10 Km	00	None within 10 Km	
(6.)	Corridors	None within 10 Km	00	None within 10 Km	
(7.)	NPA	None within 10 Km	00	None within 10 Km	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		None within 10 Km	00	None within 10 Km
(2.)	Archaeological Sites		None within 10 Km	00	None within 10 Km
(3.)	Forest		None within 10 Km	00	None within 10 Km
23.3.					
(a)Whether Noc / Permission from the competent authority is required?			No		
(b)Whether NBWL			No		

recommendation is required?

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 00
(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 5.2
(b)Land yet to be acquired(Ha) 00
(c)Status of Land acquisition if not acquired Not Applicable

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 00
(b)No. of Households 00
(c)No. of PDFs (Project Displaced Families) 00
(d)No. of PAFs (Project Affected Families) 00
(e)Funds Allocated for R&R(in Rs) 00
(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? No
(b)Whether conservation plan for Schedule-I Species has been prepared ? No
(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? Yes
(i)Details of Water Bodies in Core Area Pond of village Vadadala, Jolva and Vav
(b)Whether there is Diversion Required ? No
(c)Whether permission has been obtained from competent authority No

?

Details of Presence of Water Bodies in Buffer Area:

- (a) Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i) Details of Water Bodies in Buffer Area Pond of village Galenda
- (ii) Direction of Water Bodies in Buffer Area South East
- (iii) Distance of Water Bodies in Buffer Area 7.3

Manpower Requirement:

- (a) Permanent Employment-During Construction 00
- (b) Permanent Employment-During Operation 100
31. (c) Temporary Employment- During Construction 50
- (d) Temporary Employment- During Operation 00
- (e) No. of working days 26
- (f) Total Manpower 150

Green Belt in Ha:

- (a) Total Area of Green Belt 1.716
32. (b) Percentage of Total Project Area 33.00
- (c) No. of Plants to be Planted 4000
- (d) Funds Allocated for Plantation 300000

33. Project Benefits

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	employment opportunity

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

35. Sector Specific Details For Industrial Projects - 2

S. No.	Item	Details
S. No.	Item	Details
36.	<u>Details of Court Cases:</u>	

(a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38.	(a) Have you hired Consultant for preparing document?	Yes
	(i) Accreditation No.	NABET/EIA/1619/RA0084
	(ii) Name of the EIA Consultant	San Envirotech Pvt. Ltd., Ahmedabad
	(iii) Address	401/402/423/424/324, Medicine Market, Opp. Shefali Centre, Paldi cross Road, Ahmedabad
	(iv) Mobile No.	9825007201
	(v) Landline No.	0792658307
	(vi) Email Id	mahendra.sepl@gmail.com
	(vii) Category of Accreditation	A
	(viii) Sector of Accreditation	Industrial Projects - 2
	(ix) Validity of Accreditation	23 Dec 2019

13.5.5.2 During deliberations, the EAC noted the following: -

- Standard Terms of Reference for the project was issued on 9th July, 2018. Public hearing is exempted as the project site is located in the notified Industrial area/estate.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site.
- Total water requirement is estimated to be 750 cum/day, which includes fresh water requirement of 253 cum/day proposed to be met from GIDC water supply. Effluent from process and lab (393 cum/day) will be taken into ETP-1 and passed through RO & MEE. MEE Condensate (175 cum/day) and RO permeate (235 cum/day) will be reused. Effluent from scrubber, washing and utilities (110 cum/day) will be taken into ETP-2 and passed through RO. RO reject (35 cum/day) will be sent to MEE and RO permeate (75 cum/day) will be reused. Domestic wastewater (12 cum/day) will be treated in STP and treated water will be utilized for Greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- Considering the toxicity of Cuprous Chloride, it was suggested not produce the chemical and was agreed by the project proponent.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components

13.5.5.3 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

A. Specific Conditions:

- i. Cuprous Chloride shall not be manufactured in the unit.
- ii. No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- iii. To control source and the fugitive emissions (at 99.95%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.
- iv. Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

B. General Conditions:

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

- vi. *National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- vii. *The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with*

III. Water quality monitoring and preservation

- i. *The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises*
- ii. *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- iii. *Total fresh water requirement shall not exceed 253 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- iv. *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- v. *The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.*
- vi. *The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.*

IV. Noise monitoring and prevention

- i. *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- ii. *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- iii. *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time*

V. Energy Conservation measures

- i. *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- i. *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- ii. *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- iii. *The company shall undertake waste minimization measures as below:-*
 - a. *Metering and control of quantities of active ingredients to minimize waste.*
 - b. *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - c. *Use of automated filling to minimize spillage.*
 - d. *Use of Close Feed system into batch reactors.*
 - e. *Venting equipment through vapour recovery system.*
 - f. *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Green Belt

- i. *The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

VIII. Safety, Public hearing and Human health issues

- ii. *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- iii. *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- iv. *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- v. *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- vi. *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- vii. *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places*

IX. Corporate Environment Responsibility

- i. *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1.5 crores. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- ii. *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*
- iii. *A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.*
- iv. *Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.*
- v. *Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

X. Miscellaneous

- i. *The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.*
- ii. *The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.*
- iii. *The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.*

- iv. *The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.*
- v. *The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.*
- vi. *The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*
- vii. *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
- viii. *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
- ix. *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- x. *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- xi. *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- xii. *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- xiii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiv. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.*

Agenda No.13.5.6

Proposed Capacity Expansion of Existing Chlor Alkali Plant and establishment of New Flaker Plant, Stable Bleaching Powder Plant, Hydrogen Peroxide Plant & Captive Power Plant at Naya Nangal, Dist. Rupnagar, Punjab by M/s PUNJAB ALKALIES AND CHEMICALS LTD. (PACL) - Environmental Clearance

[IA/PB/IND2/115253/2018, .IA-J-11011/332/2018-IA-II(I)]

13.5.6.1: The proposal is for environmental clearance for the proposed capacity expansion of Existing Chlor Alkali Plant and establishment of New Flaker Plant, Stable Bleaching Powder Plant, Hydrogen Peroxide Plant & Captive Power Plant at Naya Nangal, Dist. Rupnagar, Punjab by M/s PUNJAB ALKALIES AND CHEMICALS LTD. (PACL). The project activity covered under item 4(d) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
<u>Details of Project:</u>		
1.	(a)Name of the project(s)	Proposed Capacity Expansion of Existing Chlor Alkali Plant and establishment of New Flaker Plant, Stable Bleaching Powder Plant, Hydrogen Peroxide Plant & Captive Power Plant at Naya Nangal, Dist. Rup
	(b)Name of the Company / Organisation	PUNJAB ALKALIES AND CHEMICALS LIMITED
	(c)Registered Address	S.C.O. 125-127, Sector 17-B, Chandigarh,Rupnagar,Punjab-140126
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
<u>Address for the correspondence:</u>		
	(a)Name of the Applicant	MPS Walia DGM
	(b)Designation (Owner/ Partner/ CEO)	DGM Works
2.	(c)Address	Nangal-Una Road, Naya Nangal, Dist. Rupnagar,,Rupnagar,Rupnagar,Punjab-140126
	(d)Pin code	140126
	(e)E-mail	environment@punjabalkalies.com
<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>		
	(a)Project/Activity	4(d) Chlor-alkali industry
	(b)Category	A
	(c)Proposal Number	IA/PB/IND2/115253/2018
3.	(d)Master Proposal Number(Single Window)	SW/114860/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Fresh EC
<u>Location of the Project:</u>		
4.	(a)Plot/Survey/Khasra No.	As mentioned in Additional document-"Khasra number
	(b)Pincode	140126
	(c)Bounded Latitudes (North)	FROM 31.3654 To 31.3715
	(d)Bounded Longitudes (East)	FROM 76.34402 To 76.3443
	(e)Survey of India Topo Sheet No.	F43E3, F43E7

5.	(a)Number of States in which Project will be Executed	1
	(b)Main State of the project	Punjab

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Punjab	Rupnagar	Rupnagar	-

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number No.IA-J-11011/332/2018-IA-II(I)
6. (b)Date of Apply of TOR 17 Oct 2018
- (c)Date of Issue of TOR / Standard ToR 18 Nov 2018

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
7. (b)Whether details of Public Hearing available? Yes
- (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 26 May 2019	Date : 05 Jul 2019 Distance of Public Hearing Venue from the	Punjab Alkalies & Chemicals Ltd., Nangal -Una Road, Naya Nangal, Dist.: Rupnagar,	State : Punjab District : Rupnagar Tehsil : Rupnagar Village : -	379	Give priority to and ensure adequate safety measures in proposed plant; Installation of	Additional Deputy Commissioner

		Proposed Project :	Punjab			alarms system in case of emergency; Provide training and educate the people in case of any gas leakage &	
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8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Captive Power Plant	75 MW	Greenfield Captive Power plant proposed

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Caustic Soda Lye	264000	Tons per Annum		Road	
(2.)	Hydrogen	739.2	Others	lakh/Nm3	Road	
(3.)	Hydrochloric Acid	105600	Tons per Annum		Road	
(4.)	Dilute Sulphuric Acid	5600	Tons per Annum		Road	
(5.)	Caustic Soda Flakes	66000	Tons per Annum		Road	
(6.)	Stable Bleaching	33000	Tons		Road	

	Power		per Annum			
(7.)	Chlorine (Liquid)	239733	Tons per Annum		Others	-
(8.)	Hydrogen Peroxide (on 100% concentration basis)	16500	Tons per Annum		Road	
(9.)	Chlorine (Gas)	233904	Tons per Annum		Road,Pipe Conveyor	
(10.)	Sodium Hypo Chlorite	6000	Tons per Annum		Road	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Details of Consent to Operate

(i)Whether Consent to operate obtained ? NA

(ii)Copies of all Consent to operate obtained since inception NA

9.1. (iii)Date of Issue 15 Feb 2019

(iv)Valid Upto 31 Mar 2023

(v)File No. CTOA/Renewal/RPN/2019/9025800, CTOW/Renewal/RPN/20

(vi)Application No. 9025800, 9026007

Project Cost:

(a)Total Cost of the Project at current price level (in Crores) 1240

10. (b) Funds Allocated for Environment Management (Capital) 29.70 (in Crores)

(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 3.10

(d) Funds Allocated for Environment Management Plan 10.47

(EMP) (Recurring per Annum) (in Crores)										
Whether project attracts the General Condition specified in the Schedule of EIA Notification ?										
11.	Yes									
	c)Notified Eco-sensitive areas									
	Yes									
	d)Inter-State boundaries and international boundaries									
	Yes									
Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?										
12.	No									
<u>Raw Material / Fuel Requirement:</u>										
	(a)Proposed quantity of raw material/fuel									
	307611									
13.	(b)Existing quantity of raw material/fuel									
	N/A									
	(c)Total quantity of raw material/fuel									
	307611									
13.1. Raw Material / Fuel Profile										
S. N o.	Raw Material / Fuel	Quan tity	Unit	Other Unit	Sour ce	Mode of Trans port	Other Mode of Trans port	Dista nce of Sour ce from Proje ct Site (in Km)	Type of Linkag e	Other Type of Linka ge
(1 .)	Hydrogen	2320 00	Oth ers	Nm3/ day	In hous e	Others	-	0	Others	-
(2 .)	Furnace Oil	1600 0	Oth ers	LPD	Local Depo t	Road		0	Others	Near by areas
(3 .)	HSD Fuel	1333	Oth ers	LPD	Local Depo t	Road		0	Others	Near by areas
(4 .)	Coal	3675 00	Ton s		Local depo	Road		1250	Fuel Supply	

			per Ann um		t				Agree ment		
(5 .)	bio fuel as rice husk/bagass e	8800 0	Ton s per Ann um		Local Mark ets	Road		78	Others	Ropa r	
(6 .)	limestone/hy drated lime	3675 0	Ton s per Ann um		Local Mark et	Road		145	Others	from himac hal Prade sh	

Baseline Data :

14. (a)Period of Base Line Data Collection FROM 27 Oct 2018 To 20 Jan 2019
(b)Season Winter

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	117	59	115	100
(2.)	PM2.5	Micro Gram per Meter Cube	44	7	41	60
(3.)	Cl2	Micro Gram per Meter Cube	18.3	0.9	16.3	-
(4.)	SO2	Micro Gram per Meter Cube	10.7	5.6	10.5	80
(5.)	NOx	Micro Gram per Meter Cube	24.4	13.1	23.4	80

14.2. No. of Ground Water monitoring locations : 10

S. No .	Criteria Pollutan ts	Other Criteria Pollutan ts	Heav y Metal	Uni t	Othe r Unit	Maximu m Value	Minimu m Value	Desirabl e Limit	Maximum Permissib le Limit
(1.)	pH			NA		7.33	6.85	8.5	0
(2.)	TDS			mg/ l		468	160	500	2000

(3.)	Chlorides			mg/l		137	33	250	1000
(4.)	TSS			mg/l		0	0	0	0
(5.)	Total Hardness			mg/l		410	130	200	600
(6.)	Fluoride			mg/l		0.04	0.04	1	1.5

14.3. No. of Surface Water monitoring locations : 9

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	pH		NA		7.63	6.79	A
(2.)	BOD		mg/l		11	1	A
(3.)	DO		mg/l		4.3	3.3	B
(4.)	COD		mg/l		0	0	A

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	79.3	41.7	70 (Industrial); 45 (Residential)
(2.)	Leq(Day)	A-weighted decibels(dB(A))	78.9	56.2	75 (Industrial); 55 (Residential)

14.5. No. of Soil Sample Monitored locations : 10

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	Electric Conductivity	Others	µmhos/cm	1144	265
(2.)	P(Phosphorus)			0	0
(3.)	pH			6.85	6.04
(4.)	N(Nitrogen)			0	0
(5.)	K(Potassium)	Others	gm/kg	0.36	0.02

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 12 To 15

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 6.5 To 7.0

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Surface		11936	2	Pipeline	Pumping from Nangal reservoir	2478/50-R	23 Jul 2019	12967

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)
(1.)	Industrial	1428	1450	RO & MEE resulting in ZLD	Others	Used in DM Plant	1428	0

(a)Total Waste Water Generation 1428

16.1. (b)Total Discharged Water 0

(c)Total Reused Water 1428

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Other Item	Quantity per Annu	Unit	Distance from Site(Mode of Transport	Other Mode of Trans	Mode of Disposal	Other Mode of Disposal
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				m		KM)		port		
(1.)	Metall c and woode n scraps	Industria l Waste		151.1 30	To ns	0	Road		Others	To scrap dealers approved by the company
(2.)	Plastic Waste	Plastic Waste		3.2	To ns	0	Road		Co- Processi ng	
(3.)	Used or Spent Oil	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		2.7	To ns	20	Road		Authori ze d Recycler s	
(4.)	Brine Sludge	Others	Solid Waste	6133	To ns	0	Road		Others	Landfill Facility in premises
(5.)	Munici pal Solid Waste	Municip al Solid Waste		6.407	To ns	3.4	Road		Others	Nangal Municipa l Council System
(6.)	Used lead acid batteri es	Others	Batte ries waste	0	To ns	0	Road		Others	Buyback against purchase of new batteries
(7.)	MEE Sludge	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		1750	To ns	130	Road		Treatme nt, Storage and Disposal Facility(T SDF)	

(8.)	Fly Ash	Fly Ash		55005	Tons	30	Road		Others	Cement & Brick manufacturing Unit
(9.)	Biomedical waste	Bio-Medical Waste		0.02	Tons	90	Road		Others	Authorised common BMW disposal facility
(10.)	Spent Catalyst	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		4267	Tons	20	Road		Others	To Actual Reusers
(11.)	Electronic Waste 97 in nos.	E Waste		0	Tons	0	Road		Others	To Certified E Waste Recycler
(12.)	PVC FRP Waste	Industrial Waste		4.850	Tons	0	Road		Others	To Scrap dealers approved by the company
(13.)	Waste Glass wool	Industrial Waste		3.304	Tons	0	Road		Others	To Scrap dealers approved by company
(14.)	Biomedical waste	Bio-Medical Waste		0.2	Tons	90	Road		Others	Authorised Biomedical waste disposal facility
18.										

18.1. Air Quality Impact Prediction								
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5		Microgram per Meter Cube	0	1.8	0	0.001	0
(2.)	PM10		Microgram per Meter Cube	90	1.8	1.41	91.5	100
(3.)	NOx		Microgram per Meter Cube	18.9	1.8	2.57	21.48	80
(4.)	Others(Specify)	Cl2	Microgram per Meter Cube	7.8	1.8	0.002	7.803	0
(5.)	SO2		Microgram per Meter Cube	9.1	1.8	1.99	11.1	80
18.2. Stack Details								
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)	
(1.)	DG Set-1, Existing flue gas stack	HSD	9	0.15	PM10		350 mg/Nm3	
(2.)	Boiler 2 (Thermax), Existing flue gas stack	Hydrogen gas	40	0.55	PM10		350 mg/Nm3	
(3.)	CPP Boiler stack-1, Proposed fluegas	Coal / Biomass	60	2.2	PM10		30 mg/Nm3	

	stack(90 TPH)						
(4.)	CPP Boiler stack-2, Proposed fluegas stack(90 TPH)	Coal / Biomass	60	2.2	SO2		100 mg/Nm3
(5.)	CPP Boiler stack-4, Proposed fluegas stack(90 TPH)	Coal / Bbiomas s	60	2.2	PM10		30 mg/Nm3
(6.)	HCl plant furnace-2, Existing process vent	Hydroge n	25	0.15	Others	HCl Acid mist	35 mg/Nm3
(7.)	DG Set-2, Existing flue gas stack	HSD	9	0.15	PM10		350 mg/Nm3
(8.)	DG Set-4, Proposed flue gas stack	HSD	9	0.15	PM10		350 mg/Nm3
(9.)	Rice husk boiler (Standby) , Existing fluegas stack	Rice husk	30	0.8	PM10		350 mg/Nm3
(10.))	CPP Boiler stack-3, Proposed fluegas stack(90 TPH)	Coal / Biomass	60	2.2	NOx		100 mg/Nm3
(11.))	Sodium Hypo-1, Existing	-	15	0.15	Others	Cl2	15 mg/Nm3

	process vent						
(12.)	Sodium Hypo-2, Existing process vent	-	15	0.15	Others	Cl ₂	15 mg/Nm ³
(13.)	Sodium Hypo-3, Proposed process vent	-	15	0.15	Others	Cl ₂	15 mg/Nm ³
(14.)	HCl plant furnace-1, Existing process vent	Hydrogen	25	0.15	Others	HCl Acid mist	35 mg/Nm ³
(15.)	HCl plant furnace-3, Proposed process vent	Hydrogen	25	0.15	Others	HCl Acid mist	35 mg/Nm ³
(16.)	H ₂ O ₂ plant Solvent recovery, Proposed process vent	-	32	0.4	Others	HC	15 mg/Nm ³
(17.)	DG Set-5, Proposed flue gas stack	HSD	9	0.15	PM ₁₀		350 mg/Nm ³
(18.)	DG Set-3, Existing flue gas stack	HSD	9	0.15	PM ₁₀		350 mg/Nm ³
(19.)	Boiler 1 (Thermax), Existing flue gas stack	Hydrogen gas	40	0.55	PM ₁₀		350 mg/Nm ³
(20.)	Flaker stack,	-	30	0.2	PM ₁₀		350 mg/Nm ³

	Proposed flue gas stack						
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Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA)) 75000

(b)Source Captive Power Plant / Power Grid

19. (c)Uploaded Copy of Agreement Not Applicable

(d)Standby Arrangement (Details of 1 DG Set of 1.5 MW (Existing) & 1 DG set of 1 DG Sets) MW (

(e)Stack Height (in m) 9

Land Ownership Pattern:

(a)Forest Land 0

(b)Private Land 0

20. (c)Government Land 35.96

(d)Revenue Land 0

(e)Other Land 0

Total Land 35.96

Present Land Use Breakup of the Study Area in Ha:

(a)Agriculture Area 12480.75

(b)Waste/Barren Land 1210.78

(c)Grazing/ Community Land 0

(d)Surface Water Bodies 1091.39

(e)Settlements 2076.91

21. (f)Industrial 363.81

(g)Forest 734.02

(h)Mangroves 0

(i)Marine Area 0

(j)Others : Vegetation cover and Grasslands 15723.47

Total 33681.13

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Main Plant		7.2069	Power Plant H2O2 Plant SBP Plant Flaker Plant
(2.)	Built Up Area		4.3047	Administrative Building
(3.)	Others	Storage Area	13	Storage Area CPW Open

		CPW Open space Flowtech chemical		space Flowtech chemical	
(4.)	Green belt		11.4		
Total		35.9116			
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	WLS	Nangal Wildlife sanctuary	2.6	Ecologically sensitive area - WLS present in study area	
(2.)	ESAs	None	0	Not present in study area	
(3.)	ESZs	Eco Sensitive Zone of Nangal WLS	2.6	Ecologically sensitive area - ESZ of Nangal WLS present in study area	
(4.)	NPA	Nangal Wildlife sanctuary	2.6	Ecologically sensitive area - NPA present in study area	
(5.)	Critically Polluted Area	None	0	Not present in study area	
(6.)	Corridors	None	0	Not present in study area	
(7.)	Wildlife Corridors	None	0	Not present in study area	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Others	Wetland	Nangal Wetland / Reservoir	2.6	Present in study area

(2.)	Forest		Boru Reserved Forest	9	Present in study area in NNE direction
(3.)	Defence Installations		-	0	-
(4.)	Archaeological Sites		-	0	-

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 200

Land Acquisition Status:

26. (a)Acquired Land(Ha) 35.96
 (b)Land yet to be acquired(Ha) 0
 (c)Status of Land acquisition if not acquired Not applicable as land is already acquired

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0
 (b)No. of Households 0
 (c)No. of PDFs (Project Displaced Families) 0
 (d)No. of PAFs (Project Affected Families) 0
 (e)Funds Allocated for R&R(in Rs) 0
 (f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? Yes
 (i)Details of Schedule-I Species (IWPA, 1972) faunal species i.e. Peacock or Indian peafowl (Pavo cristatus), Python (Python Molurus), Pangolin (Manis crassicaudata) and Leopard (Panthera pardus)

	(b)Whether conservation plan for Schedule-I Species has been prepared ?	Yes
	(i)Uploaded copy of conservation plan	Copy of conservation plan
	(ii)Fund Provision made	Rs. 45 lakhs
	(iii)Period of Implementation	5 years
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	Yes
	(i)Uploaded copy of approval	Copy of approval
	(ii)Letter No.	6536
	(iii)Date of issue	30 Jan 2019
	(iv)Recommendation	NA
	<u>Details of Presence of Water Bodies in Core Area:</u>	
	(a)Whether there is Presence of Water Bodies in Core Area ?	No
29.	(b)Whether there is Diversion Required ?	No
	(c)Whether permission has been obtained from competent authority ?	No
	<u>Details of Presence of Water Bodies in Buffer Area:</u>	
	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes
30.	(i)Details of Water Bodies in Buffer Area	Sutlej River
	(ii)Direction of Water Bodies in Buffer Area	East
	(iii)Distance of Water Bodies in Buffer Area	1.6
	<u>Manpower Requirement:</u>	
	(a)Permanent Employment-During Construction	0
	(b)Permanent Employment-During Operation	200
31.	(c)Temporary Employment- During Construction	0
	(d)Temporary Employment- During Operation	0
	(e)No. of working days	350
	(f)Total Manpower	200

<u>Green Belt in Ha:</u> (a)Total Area of Green Belt 11.3846 32. (b)Percentage of Total Project Area 31.66 (c)No. of Plants to be Planted 17207 (d)Funds Allocated for Plantation 1720500		
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Financial	<ul style="list-style-type: none"> Increased state and central taxes and revenues accruing to the state and central exchequers; 200 persons will be required for operating Power Plant. Local skilled and semi-skilled workers will be preferentially hired for the purpose Increase in business opportunities for local people as there will be scope of hiring vehicle like tractors and trolleys, bulldozers, JCB, excavators during construction and operation phase of the project; Increase in small-scale businesses like tea stalls, ca
(2.)	Environmental	<ul style="list-style-type: none"> Preventive health, Sanitation and safe, clean drinking water; Education and Skill development; Rural Development; Environmental Sustainability including village pond rejuvenation
(3.)	Social	<p>There shall be employment generation for the local people during the construction and operational phase of the proposed facility. The existing manpower deployed at PACL's Naya Nangal site is 400 persons direct and about 500 indirect. The existing manpower will be sufficient to operate the plants after expansion in Caustic Soda Plant. However, 200 person will be required for operating Power Plant. Local skilled and semi-skilled workers will be preferentially hired for the purpose</p>
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1922/RA 0138
- (ii) Name of the EIA Consultant Kadam Environmental
- (iii) Address 871/B/3, GIDC Makarpura, Vadodara, India “ 390 010
- (iv) Mobile No. 9714861611
- (v) Landline No. 0265613100
- (vi) Email Id kadam@kadamenviro.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 25 May 2022

13.5.6.2 The EAC, after presentation, noted the following:-

- The project/activity is covered under category A of item 4(d) ‘Chlor-alkali industry’ and category B of item 1(d) ‘Thermal Power Plants’ of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The ToR for the project was granted by the Ministry vide letter dated on 18th November 2018. Public hearing was conducted by the State Pollution Control Board on 5th July 2019.
- Nangal Wildlife Sanctuary is at a distance of 2.6 km. Sutlej River flows at a distance of 2 km in East.
- Total water requirement is 12,967 cum/day proposed to be met from irrigation Department, Govt. of Punjab. Effluent of 1428 cum/day quantity will be treated through Existing ETP followed by RO, MEE and ATFD. Domestic effluent quantity of 108 cum/day will be treated through sewage treatment plant (STP). There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- Ministry vide letter dated 26th June, 2002 clarified on non requirement on prior EC for existing unit.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

13.5.6.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

A. Specific Conditions:

- i. Solvent management shall be carried out as follows:
 - (i) Reactor shall be connected to chilled brine condenser system.
 - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (iv) Solvents shall be stored in a separate space specified with all safety measures.
 - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- ii. Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP/RO to meet the prescribed standards.

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- iii. Total fresh water requirement shall not exceed 11936 cum/day, proposed to be met from Irrigation Department, Government of Punjab. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. *As proposed, Rs.8 crores shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.*
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No.13.5.7

Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at SY.NO. 221(PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s DESI'S LABS- Environmental Clearance [IA/AP/IND2/73245/2018, IA-J-11011/77/2018-IA-II(I)]

13.5.7.1: The proposal is for environmental clearance for the proposed establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at SY.NO. 221(PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s DESI'S LABS. The project activity covered under item 5(f) of the schedule to the EIA

Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit by Desis Labs
	(b)Name of the Company / Organisation	M/S. DESI™ S LABS
	(c)Registered Address	Sy.No.221,Ramannapalam Village,kakarla Gramapanchayati,Tiruvuru mandal,krishna district,A.P,Hyderabad,Telangana-500016
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
2.	(a)Name of the Applicant	D Kesava Reddy
	(b)Designation (Owner/ Partner/ CEO)	Proprietor
	(c)Address	Flat No.203,Satya Sai residency,Plot.No.7-1-54/1,beside MCH Park,dharmkaran road,Ameerpet,Hyderabad,Telangana,,Ameerpet,Hyderabad,Telangana-500016
	(d)Pin code	500016
	(e)E-mail	desislabs@gmail.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
3.	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b)Category	A
	(c)Proposal Number	IA/AP/IND2/73245/2018
	(d)Master Proposal Number(Single Window)	SW/117681/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Fresh EC
	<u>Location of the Project:</u>	
4.	(a)Plot/Survey/Khasra No.	Sy. Nos. 221(Part)
	(b)Pincode	521227
	(c)Bounded Latitudes (North)	FROM 17.032480 To 17.032992

(d)Bounded Longitudes (East) (e)Survey of India Topo Sheet No.	FROM 80.371044 To 80.371476 E44O12 E44U9 (65C12 65D9)
5. (a)Number of States in which Project will be Executed (b)Main State of the project	1 Andhra Pradesh

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Andhra Pradesh	Krishna	Tiruvuru	Ramannapalem

Details of Terms of Reference (ToR):

(a)MoEF&CC / SEIAA File Number IA-J-11011/77/2018-IA-II(I)

6. (b)Date of Apply of TOR 28 Feb 2018

(c)Date of Issue of TOR / Standard ToR 05 Apr 2018

Details of Public Consultation:

(a)Whether the Project Exempted from Public Hearing? No

(b)Whether details of Public Hearing available? Yes

(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1.	Details of Public Hearing
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S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 13 May 2019	Date : 12 Jun 2019 Distance : 0	At Proposed Project Site	State : Andhra Pradesh District : Krishna Tehsil : Tiruvuru	150	1. Employment Potential 2. Village Development 3.	Collector & District Magistrate

		nce of Public Heari ng Venu e from the Propo sed Proje ct :		Villa Ramanna ge : palem		Pollution Control Measure s		
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8. **Details of Project Configuration/Product:**

8.1. Project Configuration						
S. No.	Plant/Equipment/Facility	Configuration	Remarks			
(1.)	Bulk Drug and Intermediates Manufacturing Unit	150 TPM	Campaign base products			
8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Bulk Drug and Intermediates	150	Others	TPM	Road	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):**

Details Not Applicable

Project Cost:

10. (a) Total Cost of the Project at current price level (in Crores) 25
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 8.83
- (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.5
- (d) Funds Allocated for 8.3

Environment Management Plan (EMP) (Recurring per Annum) (in Crores)									
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?				Yes				
	d)Inter-State boundaries and international boundaries				Yes				
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?				No				
<u>Raw Material / Fuel Requirement:</u>									
	(a)Proposed quantity of raw material/fuel				187.5				
13.	(b)Existing quantity of raw material/fuel				N/A				
	(c)Total quantity of raw material/fuel				187.5				
13.1. Raw Material / Fuel Profile									
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage	
(1.)	Synthetic Organic and Inorganic Chemicals	2250	Tons per Annum	TPM	Indigenou s	Road	120	Open Market	
<u>Baseline Data :</u>									
14.	(a)Period of Base Line Data Collection				FROM 01 Mar 2018 To 31 May 2018				
	(b)Season				Summer				
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8									
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		

(1.)	PM10	Micro Gram per Meter Cube	49	39	49	100
(2.)	NOx	Micro Gram per Meter Cube	15	10	15	80
(3.)	PM2.5	Micro Gram per Meter Cube	28	18	28	60
(4.)	SO2	Micro Gram per Meter Cube	14	10	14	80

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			NA		7.55	7.1	7	7
(2.)	TDS			mg/l		1129	475	500	500
(3.)	TSS			mg/l		18	11	100	100
(4.)	Total Hardness			mg/l		675	245	200	200
(5.)	Chlorides			mg/l		479	71	250	250
(6.)	Fluoride			mg/l		0.36	0.24	1	1

14.3. No. of Surface Water monitoring locations : 3

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	BOD		mg/l		1.4	1	B
(2.)	COD		mg/l		9.6	7.4	B
(3.)	pH		NA		8.31	7.77	B
(4.)	DO		mg/l		6.5	5.3	B

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
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(1.)	Leq(Night)	A-weighted decibels(dB(A))	42	38	45
(2.)	Leq(Day)	A-weighted decibels(dB(A))	49	42	55

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	P(Phosphorus)	Milligram per Kilogram		340	160
(2.)	K(Potassium)	Milligram per Kilogram		477	185
(3.)	pH			7.37	6.02
(4.)	N(Nitrogen)	Percent		0.082	0.02
(5.)	Electric Conductivity	Others	dS/m	1.056	0.094

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 100 To 70

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 30 To 40

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	GroundWater		205.1	0.045	Pipeline	Tube Well	1588/Hg-II/2018	26 Jul 2019	335

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S.	Type/So	Quantit	Treatm	Treatment	Mode	Other	Quantity of	Quantit
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N o.	urce	y of Waste Water Genera ted (Kilolit re per Day)	ent Capaci ty (Kilolit re per Day)	Method	of Dispo sal	Mode of Dispo sal	Treated Water Used in Recycling/ Reuse (Kilolitre per Day)	y of Dischar ged Water (Kilolitr e per Day)
(1 .)	High TDS and High COD Stream	121.1	200	Sent to stripper. Stripper condensate is disposed to cement industries for co- processing/ TSDF. Stripper bottom is sent to MEE followed by AFTD. Condensate from MEE and ATFD is sent to biological treatment plant followed by RO. RO rejects are sent to MEE and permeate is reused in cooling towers boiler make-up and scrubbers	Reuse within the Plant & Recycl ing		121.1	
(2 .)	Low TDS and Low COD Stream	25	200	Sent to biological treatment system followed by RO. RO permeate is	Reuse within the Plant & Recycl ing		25	

				reused for cooling towers makeup and scrubbers. RO rejects are sent to MEE				
(3.)	Domestic Wastewater	8	10	Sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt	Green Belt Renewal Plant		8	

(a)Total Waste Water Generation 154.1
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 154.1

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Organic Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	3609	Tons	100	Road	Others	Sent to Cement plants for co-processing or TSDF
(2.)	Inorganic Salts/Residue	Hazardous Waste (as per Hazardous and Other Waste	3034.7	Tons	250	Road	Treatment, Storage and Disposal Facility(TSDF)	

		Managem ent rules 2016)						
(3.)	ETP Sludge	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	187.2	Tons	250	Road	Treatment, Storage and Disposal Facility(TS DF)	
(4.)	Boiler Ash	Bottom Ash	6480	Tons	60	Road	Others	Sent to Brick Manufactu rers
(5.)	Spent Mixed Solvents	Industrial Waste	2520	Kilolit re	140	Road	Others	Sent to authorized recovery units

18.

18.1. Air Quality Impact Prediction

S. N o.	Criteria Polluta nts	Other Criteria Polluta nts	Unit	Baseline Concentrat ion	Distan ce GLC	Incrementa l Concentrat ion	Tot al GL C	Prescrib ed Standar d
(1.)	PM10		Microgr am per Meter Cube	46	1.7	1.8	47.8 8	100
(2.)	PM2.5		Microgr am per Meter Cube	25	1.7	0.8	25.8 3	60
(3.)	NOx		Microgr am per Meter Cube	15	1.7	13.2	28.2 2	80
(4.)	SO2		Microgr am per Meter Cube	14	1.7	11.3	25.3 6	80

18.2. Stack Details							
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	10	0.4	PM10		0.06 g/s
(2.)	8 TPH Boiler	Coal	30	0.9	PM10		0.6 g/s
(3.)	8 TPH Boiler	Coal	30	0.9	SO2		0.7 g/s
(4.)	8 TPH Boiler	Coal	30	0.6	NOx		0.25 g/s
(5.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	10	0.4	NOx		0.12 g/s
(6.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	10	0.4	SO2		0.08 g/s

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 3560
 (b)Source AP Transco
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) 2 x 1010 kVA and 2 x 500 kVA
 (e)Stack Height (in m) 10

Land Ownership Pattern:

- (a)Forest Land 0
 (b)Private Land 4.05
 20. (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 0
Total Land 4.05

<u>Present Land Use Breakup of the Study Area in Ha:</u>				
21.	(a)Agriculture Area		0	
	(b)Waste/Barren Land		0	
	(c)Grazing/ Community Land		0	
	(d)Surface Water Bodies		0	
	(e)Settlements		0	
	(f)Industrial		4.05	
	(g)Forest		0	
	(h)Mangroves		0	
	(i)Marine Area		0	
	(j)Others : 0		0	
Total			4.05	
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Green belt		1.38	
(2.)	Others	Roads	0.75	
(3.)	Safety Zone		0.45	
(4.)	Area for Solid Waste Management		0.09	
(5.)	Main Plant		1.38	
Total			4.05	
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	NPA	Not Applicable	0	No NPA within 10 km of Study Area
(2.)	Critically Polluted Area	Not Applicable	0	No Critically Polluted Area within 10 km of Study Area
(3.)	ESAs	Not Applicable	0	No ESAs within 10 km

				Study Area	
(4.)	ESZs	Not Applicable	0	No ESZs within 10 km Study Area	
(5.)	Corridors	Not Applicable	0	No Corridors within 10 km Study Area	
(6.)	Wildlife Corridors	Not Applicable	0	No Wildlife Corridors within 10 km Study Area	
(7.)	WLS	Not Applicable	0	No WLS within 10 km of Study Area	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Others	Reserve Forest	Atlapragada and Koduru RF	8.2	South Direction
(2.)	Archaeological Sites		Not Applicable	0	No Archaeological Sites within 10 km Study Area
(3.)	Forest		Kakarla RF	0.04	West Direction
(4.)	Defence Installations		Not Applicable	0	No Defence Installations within 10 km Study Area
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>(a)No. of Trees Cut for the Project (if Forest Land not Involved) Not Applicable</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p>					

Land Acquisition Status:

26. (a)Acquired Land(Ha) 4.05
(b)Land yet to be acquired(Ha) 0
(c)Status of Land acquisition if not acquired Completed

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0
(b)No. of Households 0
(c)No. of PDFs (Project Displaced Families) 0
(d)No. of PAFs (Project Affected Families) 0
(e)Funds Allocated for R&R(in Rs) 0
(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species? No
(b)Whether conservation plan for Schedule-I Species has been prepared ? No
(c)Whether conservation plan for Schedule-I Species has been approved by competent authority? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? No
(b)Whether there is Diversion Required? No
(c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

30. (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
(i)Details of Water Bodies in Buffer Area Edullavagu Stream
(ii)Direction of Water Bodies in Buffer Area South East
(iii)Distance of Water Bodies in Buffer Area 2.6

31. **Manpower Requirement:**

(a)Permanent Employment-During Construction	20	
(b)Permanent Employment-During Operation	160	
(c)Temporary Employment- During Construction	60	
(d)Temporary Employment- During Operation	40	
(e)No. of working days	30	
(f)Total Manpower	280	
<u>Green Belt in Ha:</u>		
(a)Total Area of Green Belt	1.38	
32. (b)Percentage of Total Project Area	34.07	
(c)No. of Plants to be Planted	3200	
(d)Funds Allocated for Plantation	300000	
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Financial	Reduce Imports of API Intermediates
(2.)	Social	Employment Potential
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<u>Details of Court Cases:</u>		
36.	(a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ?	No
<u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u>		
37.	(a)Whether any Direction issued under EPA Act/Air Act/Water Act ?	No
<u>Details of EIA Consultant:</u>		
38.	(a)Have you hired Consultant for preparing document?	Yes
	(i)Accreditation No.	NABET/EIA/1619/RA 0077

(ii)Name of the EIA Consultant	Team Labs and Consultants
(iii)Address	TEAM Labs and Consultants B-115-117 & 509, Annapurna Block, Aditya Enclave, Ameerpet, Hyderabad-500 038
(iv)Mobile No.	0402374855
(v)Landline No.	0402374855
(vi)Email Id	teamlabs@gmail.com
(vii)Category of Accreditation	A
(viii)Sector of Accreditation	Industrial Projects - 2
(ix)Validity of Accreditation	01 Dec 2019

13.5.7.2: The EAC, after presentation, noted the following:

- Standard Terms of Reference for the project was issued on 5th April, 2018. Public hearing for the project has been conducted by the Andhra Pradesh Pollution Control Board on 12th June, 2018. The main issues raised during public hearing are related to employment, pollution control measures, ground water contamination, rain water harvesting, safety measures, plantation, village development, etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km from the project site. Kakarla (0.05 km), Atlapragada and Konduru reserve forests (7.5 km) are located within 10 km from the project site. Edullavagu stream is flowing at a distance of 2 km in southeast direction and Kattaleru stream is at a distance of 3.7 km in northwest direction.
- The total water requirement is estimated to be 1209.3 cum/day, which includes fresh water requirement of 737.3 cum/day, proposed to be met from ground water. Necessary permission in this regard has been obtained from the State Ground water department.
- Out of total effluent of 495.9 cum/day, high COD/TDS stream of 336.9 cum/day shall be sent to stripper followed by multiple effect evaporators (MEE), and agitated thin film dryer (ATFD). The condensate from stripper shall be sent to cement plants for co-incineration, while condensate from MEE and ATFD shall be mixed with low TDS/COD from utility blow downs. Wastewater from R&D of 129 cum/day shall be treated in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers make-up and scrubbers. Domestic wastewater of 30 KLD shall be sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt.
- The EAC during deliberation noted that the public hearing report revealed that several objections have been raised against the unit. The committee suggested to submit point wise reply to the each observation/comments raised during public hearing with proper justification and commitments.

13.5.7.3: The EAC, after detailed deliberations, desired the following inputs/clarifications for further consideration of the proposal:-

- Speaker wise and Point-wise issues raised during public consultation/hearing and response of PP, along with detailed time bound action plan and budgetary provisions shall be submitted.*
- CER plan with activities proposed based on public consultation/hearing issues; and need based assessment.*
- Calculations and detailed inputs/assumption given for Incremental Concentration for NO_x and SO₂ shall be submitted in original with justification.**

Agenda No.13.5.8

Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at SY.NO. 219/1(PART), 219/2(PART), 221(PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s LAKSHMI PHARMACHEM- Environmental Clearance

[IA/AP/IND2/73243/2018, IA-J-11011/75/2018-IA-II(I)]

13.5.8.1: The proposal is for environmental clearance for the proposed establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit at SY.NO. 219/1(PART), 219/2(PART), 221(PART), Ramannapalem Village, Tiruvuru Mandal, Krishna District (Andhra Pradesh) by M/s Lakshmi Pharmachem. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Establishment of Synthetic Organic Chemicals (Bulk Drug and Intermediates) manufacturing unit by Lakshmi Pharmachem
	(b)Name of the Company / Organisation	M/S. LAKSHMI PHARMACHEM
	(c)Registered Address	Sy.No's.219-1A,219-2A &221-1,kakarla Gramapanchayati,Tiruvuru mandal,krishna district,A.P.,Krishna,Andhra Pradesh-520010
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
2.	(a)Name of the Applicant	Ramakrishna N
	(b)Designation (Owner/ Partner/ CEO)	Proprietor
	(c)Address	64-9-5A,Flat No.303,Sree Bhaskara Residency,Chennupati Ramakotaiah Street,Patamata Lanka,Vijayawada,,Tiruvuru,Krishna,Andhra Pradesh-520010
	(d)Pin code	520010
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
3.	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b)Category	A
	(c)Proposal Number	IA/AP/IND2/73243/2018
	(d)Master Proposal Number(Single	SW/117724/2019

Window)

(e)EAC concerned (for category A Projects only)

Industrial Projects - 2

(f)Project Type

Fresh EC

Location of the Project:

- (a)Plot/Survey/Khasra No. Sy. Nos. 219/1(Part), 219/2(Part) and 221(Part)
(b)Pincode 521227
4. (c)Bounded Latitudes (North) FROM 17.033247 To 17.033806
(d)Bounded Longitudes (East) FROM 80.371332 To 80.371777
(e)Survey of India Topo Sheet No. E44O12 E44U9 (65C12 65D9)
- (a)Number of States in which
5. Project will be Executed 1
(b)Main State of the project Andhra Pradesh

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Andhra Pradesh	Krishna	Tiruvuru	Ramannapalem

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/75/2018-IA-II(I)
6. (b)Date of Apply of TOR 28 Feb 2018
(c)Date of Issue of TOR / Standard ToR 05 Apr 2018

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
(b)Whether details of Public Hearing available? Yes
7. (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People	Issues Raised	Designation of Presid	Other Designation of
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					Atte nded		ing Officer	Presid ing Officer
1	Date of Advertis ement : 13 M ay 20 19	Date : 13 Ju n 20 19 Dista nce of Publi c Heari ng Venu e from the Prop osed Proje ct :	At Prop osed Proje ct Site	Sta te : Andhra Pradesh Dist rict : Krishna Teh sil : Tiruvuru Vill age : Ramann apalem	100	1. Employ ment Genera tion 2. Village Develo pment 3. Pollutio n Control Measur es	Joint Collect or & Addl. District Magistr ate	

8. Details of Project Configuration/Product:

8.1. Project Configuration						
S. No.	Plant/Equipment/Facility			Configuration	Remarks	
(1.)	Bulk Drug and Intermediates Manufacturing Unit			142.5	Campaign base products	
8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Bulk Drug and Intermediates	142.5	Others	TPM	Road	

9. In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

Details Not Applicable

Project Cost:										
	(a) Total Cost of the Project at current price level (in Crores)	25								
	(b) Funds Allocated for Environment Management (Capital) (in Crores)	7.25								
10.	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	0.5								
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	7.02								
Whether project attracts the General Condition specified in the Schedule of EIA Notification ?										
11.	d) Inter-State boundaries and international boundaries	Yes								
Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?										
12.		No								
Raw Material / Fuel Requirement:										
	(a) Proposed quantity of raw material/fuel	180								
13.	(b) Existing quantity of raw material/fuel	N/A								
	(c) Total quantity of raw material/fuel	180								
13.1. Raw Material / Fuel Profile										
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source)	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage	
(1.)	Synthetic Organic and Inorganic	2160	Tons per Annum		Indigenous	Road		120	Open Market	

[illegible]

No.	Pollutants	Criteria Pollutants		Unit	Value	Value	of inland water body
(1.)	BOD		mg/l		1.4	1	B
(2.)	DO		mg/l		6.5	5.3	B
(3.)	pH		NA		8.31	7.77	B
(4.)	COD		mg/l		9.6	7.4	B

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	49	42	55
(2.)	Leq(Night)	A-weighted decibels(dB(A))	42	38	45

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	N(Nitrogen)	Percent		0.082	0.02
(2.)	K(Potassium)	Milligram per Kilogram		477	185
(3.)	Electric Conductivity	Others	dS/m	1.056	0.094
(4.)	P(Phosphorus)	Milligram per Kilogram		340	160
(5.)	pH			7.37	6.02

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 100 To 70

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 30 To 40

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from	Mode of Transp	Method of Water Withdra	Letter No.	Date of Iss	Permitted Quantity
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		r	ty	Sourc e		ort		wal			ue	y
(1.)	GroundW ater		207.6	0.035		Pipeline		Tube Well		1588/ Hg- II/2018	26 Jul 201 9	210
15.1. (a)Whether Desalination is proposed No												
16. Waste Water Management(During Operation)												
S. N o.	Type/So urce	Quantit y of Waste Water Genera ted (KLD)	Treatm ent Capaci ty (KLD)	Treatment Method	Mode of Dispo sal	Other Mode of Dispo sal	Quantity of Treated Water Used in Recycling/ Reuse (KLD)	Quantit y of Dischar ged Water (KLD)				
(1.)	High TDS and High COD Stream	93.9	120	Sent to stripper. Stripper condensate is disposed to cement industries for co- processing/ TSDF. Stripper bottom is sent to MEE followed by AFTD. Condensate from MEE and ATFD is sent to biological treatment plant followed by RO. RO rejects are sent to MEE and permeate is reused in cooling	Reuse within the Plant & Recycl ing		93.9					

				towers boiler make-up and scrubbers				
(2.)	Low TDS and Low COD Stream	27	150	Sent to biological treatment system followed by RO. RO permeate is reused for cooling towers makeup and scrubbers. RO rejects are sent to MEE	Reuse within the Plant & Recycling		27	
(3.)	Domestic Wastewater	8	10	Sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt	Green Belt Renewal Plant		8	

(a)Total Waste Water Generation 128.9
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 128.9

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Organic Residue	Hazardous Waste (as per Hazardous and Other	2940.5	Tons	100	Road	Others	Sent to Cement plants for co-processing or TSDF

		Waste Management rules 2016)						
(2.)	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	154.8	Tons	250	Road	Treatment, Storage and Disposal Facility(TSDF)	
(3.)	Boiler Ash	Bottom Ash	6480	Tons	60	Road	Others	Sent to Brick Manufacturers
(4.)	Spent Mixed Solvents	Industrial Waste	2160	Kilolitre	140	Road	Others	Sent to authorized recovery units
(5.)	Inorganic Salts/Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2812.2	Tons	250	Road	Treatment, Storage and Disposal Facility(TSDF)	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	SO2		Microgram per Meter Cube	14	1.7	11.3	25.36	80
(2.)	PM10		Microgram per	46	1.7	1.8	47.88	100

			Meter Cube					
(3.)	PM2.5		Microgr am per Meter Cube	25	1.7	0.8	25.8 3	60
(4.)	NOx		Microgr am per Meter Cube	14	1.7	13.2	28.2 2	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	2 x 8 TPH Boiler	Coal	30	0.9	NOx		0.25 g/s
(2.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	30	0.5	SO2		0.08 g/s
(3.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	30	0.5	NOx		0.12 g/s
(4.)	2 x 8 TPH Boiler	Coal	30	0.9	PM10		0.6 g/s
(5.)	2 x 8 TPH Boiler	Coal	30	0.9	SO2		0.7 g/s
(6.)	2 x 2 Lac K.Cal Thermic Fluid Heater	Coal	30	0.5	PM10		0.06 g/s

19. **Power Requirement:**
 (a)Quantity (Kilo Volt Amps (kVA)) 3520

	(b)Source	AP Transco		
	(c)Uploaded Copy of Agreement	Not Applicable		
	(d)Standby Arrangement (Details of DG Sets)	2 x 1010 kVA and 2 x 500 kVA		
	(e)Stack Height (in m)	10		
	<u>Land Ownership Pattern:</u>			
	(a)Forest Land	0		
	(b)Private Land	4.05		
20.	(c)Government Land	0		
	(d)Revenue Land	0		
	(e)Other Land	0		
	Total Land	4.05		
	<u>Present Land Use Breakup of the Study Area in Ha:</u>			
	(a)Agriculture Area	0		
	(b)Waste/Barren Land	0		
	(c)Grazing/ Community Land	0		
	(d)Surface Water Bodies	0		
21.	(e)Settlements	0		
	(f)Industrial	4.05		
	(g)Forest	0		
	(h)Mangroves	0		
	(i)Marine Area	0		
	(j)Others : 0	0		
	Total	4.05		
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Green belt		1.38	
(2.)	Others	Roads	0.77	
(3.)	Safety Zone		0.5	
(4.)	Area for Solid Waste Management		0.1	
(5.)	Main Plant		1.3	
	Total		4.05	

23. **Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :**

23.1. **Details of Ecological Sensitivity :**

S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Critically Polluted Area	Not Applicable	0	No Critically Polluted Area within 10 km of Study Area
(2.)	Corridors	Not Applicable	0	No Corridors within 10 km Study Area
(3.)	WLS	Not Applicable	0	No WLS within 10 km of Study Area
(4.)	ESAs	Not Applicable	0	No ESAs within 10 km Study Area
(5.)	ESZs	Not Applicable	0	No ESZs within 10 km Study Area
(6.)	NPA	Not Applicable	0	No NPA within 10 km of Study Area
(7.)	Wildlife Corridors	Not Applicable	0	No Wildlife Corridors within 10 km Study Area

23.2. **Details of Environmental Sensitivity :**

S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Others	Reserve Forest	Atlapragada and Koduru RF	8	South Direction
(2.)	Archaeological Sites		Not Applicable	0	No Archaeological Sites within 10 km Study Area
(3.)	Forest		Kakarla RF	0.04	West Direction
(4.)	Defence Installations		Not Applicable	0	No Defence Installations within 10 km Study Area

- (a)Whether Noc / Permission from the competent authority is required? No
- 23.3. (b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) Not Applicable
- (b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 4.05
- (b)Land yet to be acquired(Ha) 0
- (c)Status of Land acquisition if not acquired Completed

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0
- (b)No. of Households 0
- (c)No. of PDFs (Project Displaced Families) 0
- (d)No. of PAFs (Project Affected Families) 0
- (e)Funds Allocated for R&R(in Rs) 0
- (f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species? No
- (b)Whether conservation plan for Schedule-I Species has been prepared ? No
- (c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? No
- (b)Whether there is Diversion Required? No

(c)Whether permission has been obtained from competent authority? No

Details of Presence of Water Bodies in Buffer Area:

(a)Whether there is Presence of Water Bodies in Buffer Area ? Yes

30. (i)Details of Water Bodies in Buffer Area Edullavagu Stream

(ii)Direction of Water Bodies in Buffer Area South East

(iii)Distance of Water Bodies in Buffer Area 2.4

Manpower Requirement:

(a)Permanent Employment-During Construction 20

(b)Permanent Employment-During Operation 160

31. (c)Temporary Employment- During Construction 60

(d)Temporary Employment- During Operation 40

(e)No. of working days 30

(f)Total Manpower 280

Green Belt in Ha:

(a)Total Area of Green Belt 1.38

32. (b)Percentage of Total Project Area 34.07

(c)No. of Plants to be Planted 3400

(d)Funds Allocated for Plantation 300000

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
NIL		

34. **CRZ Specific Details : Not Applicable**

35. **Sector Specific Details : NOT APPLICABLE**

Details of Court Cases:

36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is No

proposed to be set up ?

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA 0077
- (ii) Name of the EIA Consultant Team Labs and Consultants
- (iii) Address TEAM Labs and Consultants B-115-117 & 509, Annapurna Block, Aditya Enclave, Ameerpet, Hyderabad-500 038
- (iv) Mobile No. 0402374855
- (v) Landline No. 0402374855
- (vi) Email Id teamlabs@gmail.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 01 Dec 2019

13.5.8.2: The EAC, after presentation, noted the following:

- The project/activity is covered under category A of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The ToR for the project was granted by the Ministry vide letter dated on 5th April, 2018. Public hearing was conducted by the State Pollution Control Board on 12th June, 2018.
- There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site.
- The total water requirement is 352.1 cum/day including fresh water requirement of 205.1 cum/day proposed to be met from ground water. The unit obtained permission to abstract ground water of 335 KLD from State Ground water department.
- Total effluent of 154.1 cum/day will be treated through effluent treatment system. The high COD/TDS stream of 121.1 m³/day is segregated and sent to stripper followed by multiple effect evaporators (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while condensate from MEE and ATFD is mixed with low TDS/COD from utility blow downs and wastewater from R&D of 25 KLD in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers make-up and scrubbers. Domestic wastewater of 8 KLD sent to sewage treatment plant and treated wastewater is reused for on land irrigation to develop green belt.
- The EAC during deliberation noted that the public hearing report revealed that several objections have been raised against the unit. The committee suggested to submit point wise reply to the each observation/comments raised during public hearing with proper justification and commitments.

13.5.8.3: The EAC, after detailed deliberations, desired the following inputs/clarifications for further consideration of the proposal:-

- iv. *Speaker wise and Point-wise issues raised during public consultation/hearing and response of PP, along with detailed time bound action plan and budgetary provisions shall be submitted.*
- v. *CER plan with activities proposed based on public consultation/hearing issues; and need based assessment.*

Agenda No.13.5.9

Amendment in existing EC for proposed expansion of Styrene Acrylonitrile co-polymer (SAN) plant from 1,20,000 MTA to 1,60,000 MT/Annum at Plot NO. 17, 18/1, 18/2 & 20, 911 (Kalol) by M/s Ineos Styrolution India Limited.

[IA/GJ/IND2/109956/2010, J-11011/133/2010-IA.II(I)]

13.5.9.1: The proposal is for environmental clearance for the Amendment in existing EC for proposed expansion of Styrene Acrylonitrile co-polymer (SAN) plant from 1,20,000 MTA to 1,60,000 MT/Annum at Plot NO. 17, 18/1, 18/2 & 20, 911 (Kalol) by M/s Ineos Styrolution India Limited. The project activity covered under item 5(e) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	Whether it is a violation case and application is being submitted under Notification No. S.O.804(E) dated 14.03.2017 ?	No
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Amendment in Existing EC for Proposed Expansion of Styrene Acrylonitrile co-polymer (SAN) plant from 1,20,000 MTA to 1,60,000 MT/Annum and Transfer of EC from M/s. INEOS ABS (India) Limited to M/s. In
	(b)Name of the Company / Organisation	INEOS STYROLUTION INDIA LIMITED
	(c)Registered Address	5th Floor, OHM House - II, OHM Business Park,,Panchmahal,Gujarat-389330
	(d)Legal Status of the Company	Others
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Parvez H Bata
	(b)Designation (Owner/ Partner/ CEO)	PlantManager
2.	(c)Address	Halol - katol Road,,Katol,Kalol,Panchmahal,Gujarat-389330
	(d)Pin code	389330

Category of the Project/Activity as per Schedule of EIA Notification,2006:

3. (a)Project/Activity **5(e) Petrochemical based processing (processes other than cracking & A**
(b)Category **A**
(c)Proposal Number **IA/GJ/IND2/109956/2010**
(d)Master Proposal Number(Single Window) **SW/109894/2019**
(e)EAC concerned (for category A Projects only) **Industrial Projects - 2**
(f)Project Type **Expansion**

Location of the Project:

- (a)Plot/Survey/Khasra No. Plot NO. 17, 18/1, 18/2 & 20, 911 (Kalol)
(b)Pincode 389330
4. (c)Bounded Latitudes (North) FROM 22.5990528 To 22.5990667
(d)Bounded Longitudes (East) FROM 73.45165833 To 73.4517055
(e)Survey of India Topo Sheet No. F43H76, F43H10

(a)Number of States in which Project will be Executed 1
5. (b)Main State of the project Gujarat

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Panchmahal	Kalol	Halol- Kalol Road

Details of Terms of Reference (ToR)/EC:

- (a)MoEF&CC / SEIAA File Number NIL
6. (b)Date of Apply of EC NIL
(c)Date of Issue of EC NIL
(d)Previous EC Letter NIL

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
(b)Whether details of Public Hearing available? Yes
7. (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing							
S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 04 May 2019	Date : 06 Jun 2019 Distance of Public Hearing Venue from the Proposed Project : 1.7	Suvarna Hall, Kalol housing society, Kalol, Dist. Panch mahal	State : Gujarat District : Panch mahal Tehsil : Kalol Village : Kalol	51	Positive approach from villagers . they welcomed expansion so employment will increase and for development of region. No pollution issue they faced.	Resident Additional Collector & Additional District Magistrate
8. Details of Project Configuration/Product: Details Not Applicable <u>In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):</u> (a)Details of certified report on compliance of earlier environmental clearance condition (i)Certified Compliance By Regional (ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on Bhopal (iii)Letter No. 5-11/2012(ENV)/175 (iv)Status of Compliance Compiled (v)Certified report on compliance of Copy of Certified Compliance Report							

earlier environmental clearance conditions (Including Monitoring Report)

(vi) Date of site visit N/A

(b) Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Styrene Acrylonitrile (SAN)	120000	40000	160000	Tons per Annum (TPA)		Road	

(c) Details of Configuration

S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks
(1.)	Styrene Acrylonitrile (SAN)	120000 MTPA	40000 MTPA	160000 MTPA	
(2.)	ABS Sheets	2400 MTPA	-2400 MTPA	0	

Details of Consent to Operate

(i) Whether Consent to operate obtained ? NA

(ii) Copies of all Consent to operate obtained since inception NA

9.1. (iii) Date of Issue 07 May 2015

(iv) Valid Upto 23 Feb 2020

(v) File No. AWH- 70236

(vi) Application No. -

(vii) Copy of Consent to operate valid as on date Copy of Consent to Operate

Project Cost:

(a) Total Cost of the Project at current price level (in Crores) 123

10. (b) Funds Allocated for Environment Management (Capital) (in Crores) 3.23

(c) Funds Allocated Towards CER (Corporate Environment) 0.9225

Responsibility) (in Crores)										
(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)		0.085								
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No								
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No								
<u>Raw Material / Fuel Requirement:</u>										
(a)Proposed quantity of raw material/fuel		0								
13.	(b)Existing quantity of raw material/fuel	9								
(c)Total quantity of raw material/fuel		9								
13.1. Raw Material / Fuel Profile										
S. N o.	Raw Material / Fuel	Quant ity	Unit	Oth er Uni t	Source	Mode of Transp ort	Other Mode of Transp ort	Dista nce of Sourc e from Proje ct Site (in Km)	Type of Linka ge	Other Type of Linkag e
(1 .)	Styrene	9600.48	Oth ers	MT	Hazira/ GCPTC L	Road		230	Other s	Agree ment
(2 .)	Dicumly peroxide	12	Oth ers	MT	Raigad h, Mahara stra	Road		1300	Other s	through approv ed supplie r
(3 .)	Glyceren e Monoste arate	25.5	Oth ers	MT	Malaysi a- Hazira	Road		230	Other s	through approv ed supplie

										r	
(4.)	Blue Pigment	0.02	Others	MT	Dahej	Road		180	Others	through approved supplier	
(5.)	Toluene	66.67	Others	MT	Hazira	Road		230	Others	Agreement	
(6.)	Tert-dodecyl Mercaptans	45	Others	MT	Germany-Hazira	Road		230	Others	through approved supplier	
(7.)	Acrylonitrile	3733.52	Others	MT	Hazira	Road		230	Others	Agreement	
(8.)	Ethylene Bis-stereamide	12	Others	MT	Malaysia-Hazira	Road		230	Others	through approved supplier	

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Dec 2018 To 28 Feb 2019
 (b) Season Winter

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	NOx	Micro Gram per Meter Cube	21	14	21	80
(2.)	PM2.5	Micro Gram per Meter Cube	44	28	43	60
(3.)	SO2	Micro Gram per Meter Cube	10	8	10	80
(4.)	VOC	Micro Gram per Meter Cube	1	1	1	NS
(5.)	PM10	Micro Gram per Meter Cube	96	73	95	100

14.2. No. of Ground Water monitoring locations : 8

S. No .	Criteria Pollutan ts	Other Criteria Pollutan ts	Heav y Metal	Uni t	Othe r Unit	Maximu m Value	Minimu m Value	Desirabl e Limit	Maximum Permissib le Limit
(1.)	Chlorides			mg/ l		214	97	250	1000
(2.)	TSS			mg/ l		0	0	0	0
(3.)	pH			NA		7.95	7.34	8.5	0
(4.)	Fluoride			mg/ l		1.59	0.73	1	1.5
(5.)	Total Hardnes s			mg/ l		480	40	200	600
(6.)	TDS			mg/ l		760	408	500	2000
14.3. No. of Surface Water monitoring locations : 10									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		NA		7.8	6.54	A		
(2.)	DO		mg/l		4.9	3.3	A		
(3.)	BOD		mg/l		22	3	D		
(4.)	COD		mg/l		92	15	A		
14.4. No. of Ambient Noise monitoring locations : 8									
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard				
(1.)	Leq(Day)	A-weighted decibels(dB(A))	70	54.1	75				
(2.)	Leq(Night)	A-weighted decibels(dB(A))	69.5	44.1	70				
14.5. No. of Soil Sample Monitored locations : 8									
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value				
(1.)	Electric Conductivity	Others	dS/m	0.4	0.2				

(2.)	K(Potassium)	Others	g/kg	0.06	0.01
(3.)	P(Phosphorus)	Others	g/kg	0.02	0.02
(4.)	N(Nitrogen)	Percent		0.08	0.06
(5.)	pH	Others	-	8.3	7.2

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 15 To 20

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 15

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Other Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Ground Water		508	0	Pipeline		Tube Well	Nil	04 Jul 2019	493

15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)
(1.)	Industrial	91	120	ETP/ZLD	Green Belt Renewal Plant	91	
(2.)	Domestic	30	20	STP	Green Belt Renewal Plant	30	

(a)Total Waste Water Generation 121 16.1. (b)Total Discharged Water 0 (c)Total Reused Water 121								
17. Solid Waste Generation/Management								
S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(K M)	Mode of Transport	Mode of Disposal	
(1.)	Sludge from Wastewater purification	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	8.03	Tons	65	Road	Treatment, Storage and Disposal Facility(TSDF)	
(2.)	Contaminated Solvent/Mixture of Solvents	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	32.31	Tons	148	Road	Co-Processing	
(3.)	Discarded contaminated material	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	49.99	Tons	135	Road	Authorized Recyclers	
(4.)	Dist.residue from contaminated Organic solvent	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	14.6	Tons	148	Road	Co-Processing	
(5.)	Organic	Hazardous	899.35	Ton	148	Road	Co-	

	Residue	Waste (as per Hazardous and Other Waste Management rules 2016)		s			Processing	
(6.)	Chemical containing cargo residue & sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	53.53	Ton s	148	Road	Co-Processing	
(7.)	Used Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	20.2	Ton s	135	Road	Authorized Recyclers	
(8.)	Sludge & filters contaminated with Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	0.24	Ton s	148	Road	Co-Processing	
(9.)	Asbestos containing residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	4.87	Ton s	65	Road	Treatment, Storage and Disposal Facility(TSDF)	
(10.)	Waste/residue containing oil	Hazardous Waste (as per	0.97	Ton s	148	Road	Co-Processing	

		Hazardous and Other Waste Management rules 2016)						
(11.)	Heavy Metal-having residue in water purification	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	28.23	Tons	65	Road	Treatment, Storage and Disposal Facility(TSDF)	
(12.)	Oil-water cargo residue, washing water&sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	23.91	Tons	148	Road	Co-Processing	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	NOx		Microgram per Meter Cube	17.53	1	1.42	18.96	80
(2.)	PM2.5		Microgram per Meter Cube	0	0	0	0.1	0
(3.)	PM10		Microgram per Meter Cube	86.8	1	3.13	90	100
(4.)	SO2		Microgram per	8.72	1	0.01	8.74	80

			Meter Cube					
(5.)	Others(Specify)	CO	Microgram per Meter Cube	1.06	1	0.61	1.68	NS

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Incinerator (Removed)	0	0	0	PM10		0
(2.)	TFH No. 1 & 2 (1 Working + 1 standby)	Natural Gas	40.5	0.49	PM10		100 mg/m3 Permissible
(3.)	TFH No. 3 & 4 (1 working + 1 Standby)	Natural Gas	40.5	0.49	PM10		100 mg/m3 Permissible
(4.)	DG Set-1 (1000 kVA)	Diesel	18	0.2	PM10		100 mg/m3 permissible
(5.)	DG Set- 3 (1250 kVA)	Diesel	30	0.2	PM10		100 mg/m3 Permissible
(6.)	Atmospheric Vent (Reactor Safety Valves)	-	15	0.2	Others	HC	15 mg/Nm3 Permissible
(7.)	Pelletizer Vent blower-Line 1	-	15	0.2	Others	HC	15 mg/Nm3 Permissible
(8.)	Pelletizer Vent blower-Line 2	-	15	0.2	Others	HC	15 mg/Nm3 Permissible
(9.)	Pelletizer	-	15	0.2	Others	HC	15

	Vent Blower-Line 3						mg/Nm3 Permissible
(10.)	Vent Blower-Line 3, Silo top line 3	-	9	0.3	PM10		150 mg/Nm3 Permissible
(11.)	Dust collector H-501 Loading Hopper	-	9	0.3	PM10		150 mg/Nm3 Permissible
(12.)	Dust Collector NKH 501 R/S	-	9	0.3	PM10		150 mg/Nm3 Permissible
(13.)	Dust Collector for H 503/ 504/ 506	-	9	0.15	PM10		150 mg/Nm3 Permissible
(14.)	Dust Collector H 502 A/ H 502 B	-	9	0.08	PM10		150 mg/Nm3 Permissible
(15.)	Boiler- 1 & 2 (1 Working+1 Standby)	Natural Gas	30.5	0.8	PM10		100 mg/m3 Permissible
(16.)	Fume Extraction System at QA lab	-	9	0.15	Others	HC	15 mg/Nm3 Permissible
(17.)	Dust Collector H- 503 Loading Hopper	-	9	0.3	PM10		150 mg/Nm3 Permissible
(18.)	Dust collector Line 2 Silo loading Hopper	-	9	0.3	PM10		150 mg/Nm3 Permissible
(19.)	DG Set-2 (1500 kVA)	Diesel	30	0.2	PM10		100 mg/m3

							Permissible
(20.)	Pelletizer Vent Blower-Line 3 DB	-	15	0.2	Others	HC	15 mg/Nm3 Permissible
(21.)	Dust collector NKH 501 N/P	-	9	0.3	PM10		150 mg/Nm3 Permissible
(22.)	Dust collector NKH 501 T/U	-	9	0.2	PM10		150 mg/Nm3 Permissible
(23.)	Dust Collector NKP 501/ KH 502 C	-	9	0.08	PM10		150 mg/Nm3 Permissible

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 2700
 (b)Source Madhya Gujarat Vij Company (MGVCL)
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) 3 No. DG Set of 1000, 1500 & 1250 kVA
 (e)Stack Height (in m) 30

Land Ownership Pattern:

- (a)Forest Land 0
 (b)Private Land 4.79
 20. (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 0
Total Land 4.79

Present Land Use Breakup of the Study Area in Ha:

- (a)Agriculture Area 23086
 (b)Waste/Barren Land 357
 21. (c)Grazing/ Community Land 0
 (d)Surface Water Bodies 880
 (e)Settlements 1994
 (f)Industrial 778
 (g)Forest 0

(h) Mangroves	0
(i) Marine Area	0
(j) Others : Vegetation Cover	6368
Total	33463

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Others	Others	2.71	
(2.)	Main Plant		0.37	Processing area
(3.)	Area for Solid Waste Management		0.02	Haz. waste storage area
(4.)	Green belt		1.54	
(5.)	Built Up Area		0.15	Office area

Total 4.79

23. Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :

23.1. Details of Ecological Sensitivity :

S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Wildlife Corridors	None	0	Ecological Sensitive area is not present in study area
(2.)	Corridors	None	0	Ecological Sensitive area is not present in study area
(3.)	Critically Polluted Area	None	0	Ecological Sensitive area is not present in study area
(4.)	WLS	None	0	Ecological Sensitive area is not present in study area
(5.)	NPA	None	0	Ecological Sensitive area is not present in

				study area	
(6.)	ESAs	None	0	Ecological Sensitive area is not present in study area	
(7.)	ESZs	None	0	Ecological Sensitive area is not present in study area	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Others	Mountains/ Hills	Pavagadh Mountain Range	13.24	in SSE Direction
(2.)	Defence Installations		None	0	-
(3.)	Forest		Pavagadh Reserved Forest	16.68	in SSE Direction
(4.)	Archaeological Sites		Champaner monuments: UNESCO World Heritage site	14.83	in SSE Direction
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>(a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p>26. <u>Land Acquisition Status:</u></p>					

	(a)Acquired Land(Ha)	4.79
	(b)Land yet to be acquired(Ha)	0
	(c)Status of Land acquisition if not acquired	Not applicable
	<u>Rehabilitation and Resettlement (R&R):</u>	
	(a)No. of Villages	0
	(b)No. of Households	0
27.	(c)No. of PDFs (Project Displaced Families)	0
	(d)No. of PAFs (Project Affected Families)	0
	(e)Funds Allocated for R&R(in Rs)	0
	(f)Status of R&R	Completed
	<u>Details of Presence of Schedule-I Species:</u>	
	(a)Whether there is Presence of Schedule-I Species ?	Yes
	(i)Details of Schedule-I Species	Peacock
	(b)Whether conservation plan for Schedule-I Species has been prepared?	Yes
28.	(i)Uploaded copy of conservation plan	Copy of conservation plan
	(ii)Fund Provision made	500000
	(iii)Period of Implementation	5 year
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	No
	<u>Details of Presence of Water Bodies in Core Area:</u>	
	(a)Whether there is Presence of Water Bodies in Core Area ?	No
29.	(b)Whether there is Diversion Required ?	No
	(c)Whether permission has been obtained from competent authority ?	No
	<u>Details of Presence of Water Bodies in Buffer Area:</u>	
	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes
30.	(i)Details of Water Bodies in Buffer Area	Goma River
	(ii)Direction of Water Bodies in Buffer Area	East

(iii)Distance of Water Bodies in Buffer Area	0.5			
<u>Manpower Requirement:</u>				
(a)Permanent Employment-During Construction	0			
(b)Permanent Employment-During Operation	15			
31. (c)Temporary Employment- During Construction	172			
(d)Temporary Employment- During Operation	16			
(e)No. of working days	365			
(f)Total Manpower	203			
32. <u>Green Belt in Ha:</u>				
S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	1.19	0.34	1.53
(2.)	Percentage of Total Project Area	25	7	32
(3.)	No. of Plants	280	2395	2675
(4.)	Funds Allocated	0	249080	249080
33. <u>Project Benefits</u>				
S. No.	Type of Project Benefits	Details of Project Benefits		
(1.)	Social	INEOS Styrolution India Limited has initiated up-gradation of Existing school at Katol by Construction of Lunch room in Primary school with utensils provision, installation of RO water plant and water cooler at Katol School. Also Public Announcement system provision is proposed for the school.		
34. CRZ Specific Details : Not Applicable				
35. Sector Specific Details : NOT APPLICABLE				
36. <u>Details of Court Cases:</u>				

(a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38.	(a) Have you hired Consultant for preparing document?	Yes
	(i) Accreditation No.	NABET/EIA/1619/RA 0042
	(ii) Name of the EIA Consultant	Kadam Environmental Consultants
	(iii) Address	871/B/3, GIDC Makarpura, Vadodadara, Gujarat 390010
	(iv) Mobile No.	0265613132
	(v) Landline No.	0265613100
	(vi) Email Id	kadam@kadamenviro.com
	(vii) Category of Accreditation	A
	(viii) Sector of Accreditation	Industrial Projects - 2
	(ix) Validity of Accreditation	15 Oct 2019

13.5.9.2: The EAC, after presentation noted the following:

- The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The ToR for the project was granted by the Ministry vide letter dated on 14th December, 2018. Public hearing was conducted by the State Pollution Control Board on 6th June, 2019.
- There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site.
- The total water requirement is 584 cum/day including fresh water requirement of 489 cum/day proposed to be met from ground water.
- Effluent of 91 cum/day will be treated through Existing ETP having capacity 120 KLD. And domestic effluent through existing STP having capacity 30 KLD. The plant will be based on Zero Liquid discharge system (On land irrigation & Domestic use).
- The committee, also, noted that the presence of schedule-1 species such as peacocks were present in the study area and conservation plan needs to be prepared.

13.5.9.2 The EAC during deliberation noted that earlier environmental clearance was granted in favour of M/s INEOS ABS (India) Limited, however the proposal for EC was submitted by M/s Ineos Styrolution India Limited. The committee suggested the project proponent to submit the proposal for transfer of EC first and then submit proposal for EC accordingly. The EAC, after detailed deliberation returned the proposal in present form.

Agenda No.13.5.10

13.5.10 Expansion of molasses based distillery 60 KLPD to 150 KLPD (integrated project complex of 5500 TCD Sugar factory, 32 MW Co-gen plant) at Village Najik Babhulgaon, Post Rakshi, Taluka Shvgaon, District Ahmednagar (Maharashtra) by M/s Gangamai Industries and Constructions Ltd - For reconsideration of Environmental Clearance

[IA/MH/IND2/55812/2014, J-11011/14/2015/IA.II(I)]

13.5.10.1: The proposal is for environmental clearance for the proposed expansion of molasses based distillery 60 KLPD to 150 KLPD (integrated project complex of 5500 TCD Sugar factory, 32 MW Co-gen plant) at Village Najik Babhulgaon, Post Rakshi, Taluka Shvgaon, District Ahmednagar (Maharashtra) by M/s Gangamai Industries and Constructions Ltd. The project activity covered under item 5(g) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Gangamai Industries And Constructions Ltd.
	(b)Name of the Company / Organisation	Mr. A. L. More
1.	(c)Registered Address	2nd floor , Tapadia Terraces, Adalat Road, Aurangabad - 431001,Ahmednagar,Maharashtra-431001
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	
2.	(b)Designation (Owner/ Partner/ CEO)	Chief Financial officer
	(c)Address	NIL
	(d)Pin code	431001
	(e)E-mail	gangamaisugar_ind@rediffmail.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(g) Distilleries
	(b)Category	A
	(c)Proposal Number	IA/MH/IND2/55812/2014
3.	(d)Master Proposal Number(Single Window)	SW/89779/2018
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Expansion
4.	<u>Location of the Project:</u>	

(a)Plot/Survey/Khasra No.	6, 222/3, 223, 224, 228/1, 228/2, 228/3, 233, 234
(b)Pincode	414502
(c)Bounded Latitudes (North)	FROM 192238.22 To 192255.27
(d)Bounded Longitudes (East)	FROM 751648.82 To 751709.86
(e)Survey of India Topo Sheet No.	47M3, 47 M7
5. (a)Number of States in which Project will be Executed	1
(b)Main State of the project	Maharashtra

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Maharashtra	Ahmednagar	Shevgaon	Najik babhulgaon

Details of Terms of Reference (ToR)/EC:

- (a)MoEF&CC / SEIAA File Number J-11011/14/2015/IA II (I)
- (c)Date of Issue of TOR 30 Apr 2015
6. (f)Previous TOR Letter Copy of Previous TOR letter
- (b)Date of Apply of EC 09 Jun 2016
- (c)Date of Issue of EC 18 Oct 2017
- (d)Previous EC Letter Copy of Previous EC letter

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
7. (b)Whether details of Public Hearing available? Yes
- (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. N o.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 10 Sep	Date : 17 Oct	At the Factory site - Gangam	State : Maharashtra Dist : Ahmedn	178	There was no any major	District Magistrate

	20 18	20 18	ai Industrie s And Construc tions Ltd., (GIACL), Najik Babulga on, Post- Rakshi, Tal.: Shevgao n, Dist.: Ahmedn agar, Maharas htra State.	riect : agar Teh Shevga sil : on Villa Najik ge : babhulg aon		issues raised during Public hearing . Few issues raised they are as â€“ - provisio n of employ ment to local people - provisio n of health care facilities - supply of boiler ash i	
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Details of Project Configuration/Product:

8.

Details Not Applicable

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

(a)Details of certified report on compliance of earlier environmental clearance condition

(i)Certified Compliance By Regional

(ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified Nagpur

9.

report on

(iii)Letter No. EC-909/RON/2018-NGP/4701

(iv)Status of Compliance Compiled

(v)Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report) Copy of Certified Compliance Report

(vi)Date of site visit N/A

(b)Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product
(1.)	Rectified Spirit	60	90	150	Kilo Litre per Day(KLD)		Road
(2.)	Compost (from spent wash treatment)	20935	0	20935	Tons per Annum(TPA)		Road
(3.)	Spent wash Dry powder (99% solids)	0	33000	33000	Tons per Annum(TPA)		Road
(4.)	Extra Neutral Alcohol	60	90	150	Kilo Litre per Day(KLD)		Road
(5.)	Ethanol	60	90	150	Kilo Litre per Day(KLD)		Road
(6.)	Spent wash Dry powder (95 % solids)	0	24090	24090	Tons per Annum(TPA)		Road

(c)Details of Configuration

S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks
(1.)	Daitillery	60 KLPD	90 KLPD	150 KLPD	

Details of Consent to Operate

- 9.1. (i)Whether Consent to operate obtained ? NA
- (ii)Copies of all Consent to operate obtained since inception NA
- (iii)Date of Issue 18 May 2018
- (iv)Valid Upto 31 Aug 2018
- (v)File No. Format - 1.0/BO/CAC-CELL/UAN NO 0000034874/O/CAC-1
- (vi)Application No. MPCB-CONSENT-0000034874p

Project Cost:

10. (a)Total Cost of the Project at current price level (in Crores) 19.18
- (b) Funds Allocated for Environment Management (Capital) 7.70 (in Crores)

	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	0.5							
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	0.53							
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No							
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No							
<u>Raw Material / Fuel Requirement:</u>									
13.	(a) Proposed quantity of raw material/fuel	10800							
	(b) Existing quantity of raw material/fuel	7200							
	(c) Total quantity of raw material/fuel	18000							
13.1. Raw Material / Fuel Profile									
S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	Molasses	118800	Tons per Annum	Own Sugar Factory	Pipe Conveyor	0.5	Captive		
<u>Baseline Data :</u>									
14.	(a) Period of Base Line Data Collection	FROM 01 Mar 2018 To 31 May 2018							
	(b) Season	Summer							
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8									
S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard			
(1.)	SO2	Micro Gram per	30.20	9.3	27.35	80			

		Meter Cube				
(2.)	PM2.5	Micro Gram per Meter Cube	26.20	13.80	22.13	60
(3.)	PM10	Micro Gram per Meter Cube	68.2	55.70	64.6	100
(4.)	NOx	Micro Gram per Meter Cube	39.90	14.30	35.75	80

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			NA		7.73	7.28	6.5	8.5
(2.)	TSS			mg/l		50.80	10.23	100	100
(3.)	Chlorides			mg/l		139.54	58.12	250	250
(4.)	TDS			mg/l		1020.96	359.51	500	500
(5.)	Fluoride			mg/l		0.25	0.05	1	1
(6.)	Heavy Metals		Iron as Fe	mg/l		0.3	0.06	0.30	0.30
(7.)	Total Hardness			mg/l		337.57	185.59	200	200

14.3. No. of Surface Water monitoring locations : 3

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	COD		mg/l		28.64	20.39	E
(2.)	DO		mg/l		2.8	2.4	E
(3.)	pH		NA		7.54	7.47	E
(4.)	BOD		mg/l		11.39	8.87	E

14.4. No. of Ambient Noise monitoring locations : 7

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
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(1.)	Leq(Night)	A-weighted decibels(dB(A))	48	37	70				
(2.)	Leq(Day)	A-weighted decibels(dB(A))	68.9	49.8	75				
14.5. No. of Soil Sample Monitored locations : 8									
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value				
(1.)	N(Nitrogen)	Milligram per Kilogram		953.56	144.40				
(2.)	P(Phosphorus)	Milligram per Kilogram		145.64	24.12				
(3.)	Electric Conductivity	Millisiemens per Centimetre		2.96	1.19				
(4.)	pH	Others	NA	7.61	7.46				
(5.)	K(Potassium)	Milligram per Kilogram		412.26	158.92				
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 19.10 To 2.15</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 1.4 To 19.70</p> <p>(c)Whether Ground Water Intersection will be there ? NA</p>									
15. Details of Water Requirement (During Operation)									
S. No.	Source	Required Quantity	Distance from Source	Mode of Transport	Other Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
1	Surface	271	15	Pipeline		Jack Well	Ow. No./JID/N.I.Agreement/6643	08 Dec 2014	285
<p>15.1. (a)Whether Desalination is proposed No</p>									
16. Waste Water Management(During Operation)									

S. No.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	Domestic Effluent	8	25	STP	Green Belt Renewal Plant		8	
(2.)	Spentwash	1182	1200	Biomethanation followed by Conc. in MEE & Powder in ATFD	Others	Spentwash powder is used as manure	1182	0
(3.)	Industrial other effluent	375.25	1000	CPU comprises of Primary-secondary and tertiary treatment	Reuse within the Plant & Recycling		375.25	

(a)Total Waste Water Generation 1565.25
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 1565.25

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Yeast Sludge	Industrial Waste		13200	Tons	5	Road		Others	used as manure

18.

18.1. Air Quality Impact Prediction

S.	Criteria	Other	Unit	Baseline	Distance	Incremental	Total	Prescribed
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N o.	Pollutants	Criteria Pollutants		Concentration	ce GLC	I Concentration	GLC	ed Standard
(1.)	PM2.5		Microgram per Meter Cube	22.13	1.11	0.00039	22.13039	60
(2.)	SO2		Microgram per Meter Cube	27.35	1.11	0.0002	27.3502	80
(3.)	PM10		Microgram per Meter Cube	64.6	1.11	0.0016	64.6016	100
(4.)	NOx		Microgram per Meter Cube	35.75	1.11	0.0001	35.7501	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Boiler	Bagasse	76	4	PM10		64.60
(2.)	Boiler	Biogas	45	1.2	SO2		63

Power Requirement:

19. (a)Quantity (Kilo Volt Amps (kVA)) 4000
(b)Source Own Co-gen plant
(c)Uploaded Copy of Agreement Copy of Agreement
(d)Standby Arrangement (Details of DG Sets) 900 KVA
(e)Stack Height (in m) 5.5

Land Ownership Pattern:

20. (a)Forest Land 0
(b)Private Land 33.06
(c)Government Land 0
(d)Revenue Land 0
(e)Other Land 0
Total Land 33.06

21. **Present Land Use Breakup of the Study Area in Ha:**

(a)Agriculture Area	18388
(b)Waste/Barren Land	840
(c)Grazing/ Community Land	130
(d)Surface Water Bodies	3023
(e)Settlements	1316.9
(f)Industrial	33.06
(g)Forest	0
(h)Mangroves	0
(i)Marine Area	0
(j)Others : Fallow land	7684
Total	31414.960000000003

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Built Up Area		17.95	Distillery, Sugar factory & Co-gen plant
(2.)	Green belt		10.17	

Total 28.12

23. Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :

23.1. Details of Ecological Sensitivity :

S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	ESZs	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(2.)	Corridors	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(3.)	Wildlife Corridors	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs,

				ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(4.)	Critically Polluted Area	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(5.)	WLS	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(6.)	NPA	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project
(7.)	ESAs	Nil	0	There is no presence of any CPA, WLS, NPA, ESAs, ESZs, Corridors & Wildlife corridors in 10 Km radius of project

23.2. Details of Environmental Sensitivity :

S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		Nil	0	There is no presence of defense installation in 10 Km radius of project
(2.)	Archaeological Sites		Mahadev Mandir at Ghotan	2.5	Not notified by Archaeological department
(3.)	Forest		Nil	0	There is no presence of defense installation in 10 Km radius of project

(a)Whether Noc / Permission from the competent authority is required? No

23.3. (b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

(a)Acquired Land(Ha) 0

26. (b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired 0

Rehabilitation and Resettlement (R&R):

(a)No. of Villages 0

(b)No. of Households 0

27. (c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

(a)Whether there is Presence of Schedule-I Species ? Yes

(i)Details of Schedule-I Species Indian Blackbuck (Antilope cervicapra)

28. (b)Whether conservation plan for Schedule-I Species has been prepared ? No

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? No

(b)Whether there is Diversion No

Required ?

(c)Whether permission has been obtained from competent authority No ?

Details of Presence of Water Bodies in Buffer Area:

30. (a)Whether there is Presence of Water Bodies in Buffer Area ? No

Manpower Requirement:

- (a)Permanent Employment-During Construction 10
(b)Permanent Employment-During Operation 30
31. (c)Temporary Employment- During Construction 15
(d)Temporary Employment- During Operation 20
(e)No. of working days 330
(f)Total Manpower 75

32. **Green Belt in Ha:**

S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	10.17	0	10.17
(2.)	Percentage of Total Project Area	38	0	38
(3.)	No. of Plants	15658	0	15658
(4.)	Funds Allocated	50	0	50

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment Generation, Improvement in physical and social infrastructure, Upliftment of local population,
(2.)	Financial	The alcohol generated from project would be used for blending it with petrol so as to save foreign currency
(3.)	Environmental	The community that resides in the nearby areas will be benefited directly or indirectly by this project.

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1518/SA 063
- (ii) Name of the EIA Consultant Equinox Environmets (I) Pvt. Ltd., Kolhapur
- (iii) Address F-11, Namdev Nest, 1160 â€™Eâ€™™ ward, Opp. Kamala College, Sykes Extension, Kolhapur
- (iv) Mobile No. 9657865122
- (v) Landline No. 0231253123
- (vi) Email Id projects@equinoxenvi.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 21 Oct 2018

Additional Detail Sought Additional Detail Sought, 3.

Additional Detail Sought			
Sno.	ADS Letter	Remarks	Date of ADS
1.	NA	Deferred	17 May 2019
2.	<u>ADS Letter</u>	R.O Certified report on compliance of EC conditions granted to 5500 TCD sugar factory and 32 MW Co-gen plant	21 Jun 2019
3.	NA		20 Aug 2019
4.	<u>ADS Letter</u>	Amendment in ToR's through revised Form-1 for regularizing total project land area from 27.06 Ha to	20 Sep 2019

	33.7 Ha as per clarification presented.	
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13.5.10.2: During deliberations, the EAC noted the following: -

- The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal/approval at Central level in the Ministry.
- Standard Terms of Reference for the project was issued on 14th April, 2018. Public hearing has been conducted by the Maharashtra Pollution Control Board, (MPCB) on 17th October, 2018. Main issues raised during the public hearing are related to developmental plan of GIACL under expansion, pollutants generated under distillery project and its disposal or treatment facilities etc.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site.
- Total water requirement will be 1619 cum/day proposed to be met from Jayakwadi dam.
- Spent wash generated from 150 KLPD molasses based distillery will be to the tune of 1182 M3/Day shall be primarily treated in bio-methanation plant followed by concentration in MEE. Conc. Spent wash will be forwarded to Agitator Thin Film Dryer (ATFD) for drying and forms dry powder 95% or 99% solids. 95% powder would be mixed with boiler ash to form manure during crushing season. 99% powder bagged and sold during non-crushing season. Spentlees to the tune of 339 M3/Day, MEE condensate 1086 M3/Day and Other effluents (viz. cooling blow down, lab & washing shall be forwarded to CPU along with spent lees (339 M3/Day) and MEE condensate (1086 M3/Day) will be treated in Condensate Polishing Unit (CPU). Treated water from CPU will be used in process for dilution of molasses. This achieved Zero Liquid Discharge (ZLD) of process effluent.
- Earlier, the Ministry has issued EC vide letter dated 18th October, 2017 for 60 KLPD molasses based distillery and in favour of M/s Gangamai Industries And Constructions Ltd. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 21st December, 2018. The Committee found the certified compliance report to be satisfactory.
- SEIAA Maharashtra, vide letter dated 11th March, 2015, has granted environmental clearance in favour of M/s Gangamai Industries And Construction Ltd for expansion of sugar factory from 2500 to 5500 TCD and co-generation from 12 to 32 MW. The monitoring report on compliance status of EC conditions has been forwarded by the Ministry's Regional Office at Nagpur vide letter dated 21st June, 2019. The Committee found the certified compliance report to be satisfactory.
- The expenditure towards CER for the project would be 1.5% of the project cost as committed by the project proponent.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.

13.5.10.3 The proposal was earlier considered by the EAC in its meeting held on 29-31 July, 2019, wherein the EAC observed that as per the Form-1 (prescribed for ToR), total plot area was 27.06 ha. However, during presentation, project proponent informed that they have purchased the adjacent plot of area 6 ha for the proposed expansion. Accordingly, total plot area would be increased to 33.06 ha, which is not consistent with the ToR granted by the Ministry and also renders the public hearing conducted by SPCB (for an area of 27.06 ha) meaningless. The project proponent has clarified that the said plot area 33.06 ha has mentioned in the Draft EIA, Final EIA and Form-2. Additional information submitted by the project proponent found to be addressing the concerns raised by the Committee.

113.5.10.4 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

A. Specific Conditions:

- i. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- ii. All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.

B. General Conditions:

I. Statutory compliance

- (i) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (ii) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- (iii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

- (i) The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- (ii) The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- (iii) The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- (iv) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- (v) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- (vi) Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- (viii) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

III. Water quality monitoring and preservation

- i. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises and connected to SPCB and CPCB online servers.

- ii. *As committed, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- iii. *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- iv. *The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.*
- v. *Total fresh water requirement shall not exceed 1619 cum/day proposed to be met from Jayakwadi dam. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- vi. *Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.*
- vii. *The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.*
- IV. *Noise monitoring and prevention*
 - (i) *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
 - (ii) *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
 - (iii) *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time*
 - (iv) *V. Energy Conservation measures*
 - (v) *The energy sources for lighting purposes shall preferably be LED based.*
- V. *Waste management*
 - (i) *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
 - (ii) *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
 - (iii) *The company shall undertake waste minimization measures as below:-*
 - (a) *Metering and control of quantities of active ingredients to minimize waste.*
 - (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (c) *Use of automated filling to minimize spillage.*
 - (d) *Use of Close Feed system into batch reactors.*
 - (e) *Venting equipment through vapour recovery system.*
 - (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation*
- VI. *Safety, Public hearing and Human health issues*
 - (i) *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
 - (ii) *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
 - (iii) *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
 - (iv) *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*

- (v) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - (vi) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places
- VII. Corporate Environment Responsibility
- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility. At least 1% of capital const shall be dedicated towards CER.
 - (ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
 - (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- VIII. Miscellaneous
- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
 - (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - (iv) The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
 - (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - (vi) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Amendments/Others

Agenda No.13.6.1

Exploratory Drilling and seismic survey of four (04) wells in Block CB-ONN-2010/5 at District Patan (Gujarat) by M/s Consortium of Pan India Consultants Private Limited - amendment in EC reg.

[IA/GJ/IND2/117258/2019, J-11011/276/2014-IA.II(I)]

13.6.1.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 28th March 2016 to the project Exploratory drilling in PEL Block CB-ONN-2010/5 in favour of M/s. Consortium of Pan India Consultants Pvt Ltd.

13.6.1.2 The project proponent has requested for amendment in the ToR/EC with

Sl No	Para of EC issued by MoEF&CC	Details as per the ToR/EC	To be revised/ read as	Justification/ reasons
1	Subject:	Exploratory Drilling and seismic survey of four (04) wells in block CB-ONN-2010/5 at District Patan Gujarat by M/s	Exploratory Drilling of Eight (08) Exploratory wells and Seismic survey in block CB-ONN-2010/5 at District Patan	Requires to carry on further exploration in subsequent period in the same area, having same boundary and co-ordinates.

		consortium of Pan India Consultants Pvt. Ltd - Environmental Clearance reg.	Gujarat by M/s consortium of Pan India Consultants Pvt. Ltd.	
2	2.0	The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that proposal is for Exploratory Drilling and seismic survey of four (04) wells in block CB- ONN-2010/5 at District Patan, Gujarat.	2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that proposal is for Exploratory Drilling of eight (08) wells and seismic survey in block CB- ONN-2010/5 at District Patan, Gujarat.	-Do-

13.6.1.3 The Committee during deliberations observed that the earlier environmental clearance was granted for exploratory drilling of 4 wells in CB-ONN-2010/5 block and now the project proponent want to increase the number of wells from 4 to 8, the same will change the scope of the project for which EC was granted in 28th March 2016. Further, the committee also noted that the application for amendment in environmental clearance has been submitted by M/s Pan India Consultants Pvt Ltd. However, the environmental clearance was granted by the Ministry in favour of M/s consortium of Pan India Consultants Pvt Ltd.

The EAC, after detailed deliberations, found the present proposal not admissible under the amendment category, since, the PP, has already completed the drilling of 4 wells and seeking for another 4 wells, which amounts be an expansion. The Committee suggested the project proponent to submit afresh proposal for environmental clearance under expansion after transfer of EC from M/s Consortium of Pan India Consultants Pvt Ltd to M/s Pan India Consultants Pvt Ltd. Therefore, the committee recommended the proposal for rejection.

Day 3: 25th October 2019

13.7 Environmental Clearance

Agenda No.13.7.1

Proposed Specialty Chemicals Manufacturing Project (Speciality Chemicals : 105 MT/month) at Plot No.: 4, Block No. 253 Paiki 1, Village Nanapur, Taluka Prantij, & District Sabarkantha (Gujarat) by M/s Hexane Pharmachem Industries - Environmental Clearance

[IA/GJ/IND2/64726/2017, IA-J-11011/232/2017-IA-II(I)]

13.7.1.1: The proposal is for environmental clearance for the proposed Specialty Chemicals Manufacturing Project (Speciality Chemicals : 105 MT/month) at Plot No.: 4, Block No. 253 Paiki 1, Village Nanapur, Taluka Prantij, & District Sabarkantha (Gujarat) by M/s Hexane Pharmachem Industries. The project activity covered under item 5(f) of the schedule to the EIA

Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	M/s. Hexane Pharmachem Industries
	(b)Name of the Company / Organisation	HEXANE PHARMACHEM INDUSTRIES
1.	(c)Registered Address	PLOT NO. 4, BLOCK NO. 253, VILL: NANANPUR, TALUKA : PRANTIJ, DISTRICT : SABARKANTHA,Sabar Kantha,Gujarat-383210
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	NAVNEET PATEL PATEL
	(b)Designation (Owner/ Partner/ CEO)	PARTNER
2.	(c)Address	PLOT NO. 4, BLOCK NO. 253, VILLAGE NANANPUR, TALUKA PRANTIJ, DISTRICT SABARKANTHA,,Prantij,Sabar Kantha,Gujarat-383210
	(d)Pin code	383210
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b)Category	A
3.	(c)Proposal Number	IA/GJ/IND2/64726/2017
	(d)Master Proposal Number(Single Window)	SW/84566/2018
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	New project
	<u>Location of the Project:</u>	
	(a)Plot/Survey/Khasra No.	plot no. 4, Block no 253 paiki 1
	(b)Pincode	383210
4.	(c)Bounded Latitudes (North)	FROM 72.949760 To 72.949861
	(d)Bounded Longitudes (East)	FROM 23.524779 To 23.524990
	(e)Survey of India Topo Sheet No.	F43A14

5.	(a)Number of States in which Project will be Executed	1
	(b)Main State of the project	Gujarat

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Sabar Kantha	Prantij	Nananpur

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/232/2017-IA-II(I)
6. (b)Date of Apply of TOR 16 May 2017
- (c)Date of Issue of TOR / Standard ToR 01 Aug 2017

Details of Public Consultation:

- (a)Whether the Project Exempted from Public Hearing? No
7. (b)Whether details of Public Hearing available? Yes
- (c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertising : 16 Aug 2018	Date : 18 Sep 2018 Distance of Public Hearing Venue from	plot no. 4, block no. 253 paiki 1, Nananpur, Prantij, Sabarkantha	State : Gujarat District : Sabar Kantha Tehsil : Prantij Village : nananpur	63	employment of local people, safety of workers , CSR activity & environment protection	Additional District Magistrate

		the Propo sed Projec t :						
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8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	production plant	manufacturing of product	
(2.)	utility, fuel storage & stack	utility area	
(3.)	ETP & solid waste storage area	effluent treatment facility & waste storage	
(4.)	office	administrative works	
(5.)	security cabin	allocated area of security officer	
(6.)	Solvent & raw material storage	solvent & raw material storage	
(7.)	drying, grinding, packaging	dryer, grinder & package area	
(8.)	finished good storage	product storage area	

8.2. Product

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport / Transmission of Product	
(1.)	Cetyl Pyridinium Chloride	12	Tons per Annum	Road, Rail	
(2.)	Tetra Butyl Ammonium Chloride	24	Tons per Annum	Road, Rail	
(3.)	Cetramide	12	Tons per Annum	Road, Rail	
(4.)	Cetramide Strong Solution 40 %	12	Tons per Annum	Road, Rail	
(5.)	Ethyl Triphenyl Phosphonium Bromide	12	Tons per Annum	Road, Rail	
(6.)	Lauryl Pyridinium Chloride	12	Tons per Annum	Road,Rail	
(7.)	Methyl Triphenyl	36	Tons per	Road,Rail	

	Phosphonium Bromide		Annum			
(8.)	Tetra Butyl Ammonium Bromide (Powder)	120	Tons per Annum		Road,Rail	
(9.)	Tetra Butyl Ammonium Bromide (Solution)	300	Tons per Annum		Road,Rail	
(10.)	Tetra Butyl Ammonium Iodide	12	Tons per Annum		Road,Rail	
(11.)	Tetra Methyl Ammonium Chloride	24	Tons per Annum		Road,Rail	
(12.)	Tetra Octyl Ammonium Bromide	24	Tons per Annum		Road,Rail	
(13.)	Tetra Ethyl Ammonium Bromide	60	Tons per Annum		Road,Rail	
(14.)	Benzyl Tri Butyl Ammonium Chloride	12	Tons per Annum		Road,Rail	
(15.)	Cetyl Dimethyl Benzyl Ammonium Bromide	12	Tons per Annum		Road,Rail	
(16.)	Mesetronium Etho Sulphate	12	Tons per Annum		Road,Rail	
(17.)	Methyl Triphenyl Phosphonium Chloride	24	Tons per Annum		Road,Rail	
(18.)	Methyl Triphenyl Phosphonium Iodide	12	Tons per Annum		Road,Rail	
(19.)	Tetra Phenyl Phosphonium Bromide	12	Tons per Annum		Road,Rail	
(20.)	Benzyl Tri Methyl Ammonium Chloride (Powder)	192	Tons per Annum		Road,Rail	
(21.)	Cetyl Trimethyl Ammonium Bromide	12	Tons per Annum		Road,Rail	
(22.)	Cetyl Trimethyl Ammonium Chloride 30 %	12	Tons per Annum		Road,Rail	
(23.)	Benzyl Triphenyl Phosphonium Chloride	12	Tons per Annum		Road,Rail	
(24.)	Methyl Tributyl Ammonium Chloride	60	Tons per Annum		Road,Rail	

	75 %				
(25.)	Methyl Trioctyl Ammonium Chloride 95 %	12	Tons per Annum	Road,Rail	
(26.)	Phenyl Trimethyl Ammonium Chloride	24	Tons per Annum	Road,Rail	
(27.)	Tetra Butyl Ammonium Hydrogen Sulphate	24	Tons per Annum	Road,Rail	
(28.)	Tri Ethyl Benzyl Ammonium Chloride	60	Tons per Annum	Road,Rail	
(29.)	Benzalkonium Chloride 50 %	12	Tons per Annum	Road,Rail	
(30.)	Benzyl Tri Butyl Ammonium Bromide	12	Tons per Annum	Road,Rail	
(31.)	Butyl Triphenyl Phosphonium Bromide	24	Tons per Annum	Road,Rail	
(32.)	Butyl Triphenyl Phosphonium Chloride	12	Tons per Annum	Road,Rail	
(33.)	Cetyl Dimethyl Benzyl Ammonium Chloride	12	Tons per Annum	Road,Rail	
(34.)	Dodecyl Trimethyl Ammonium Chloride	12	Tons per Annum	Road,Rail	
(35.)	Tri Ethyl Methyl Ammonium Chloride	12	Tons per Annum	Road,Rail	
(36.)	Tri Ethyl Butyl Ammonium Bromide	12	Tons per Annum	Road,Rail	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):**

Details Not Applicable

Project Cost:

- (a) Total Cost of the Project at current price level (in Crores) 3.60
10. (b) Funds Allocated for Environment Management (Capital) (in Crores) 0.4
- (c) Funds Allocated Towards CER 0.072

(Corporate Environment Responsibility) (in Crores)											
(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)		0.31									
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No									
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No									
<u>Raw Material / Fuel Requirement:</u>											
	(a)Proposed quantity of raw material/fuel	202.56									
13.	(b)Existing quantity of raw material/fuel	N/A									
	(c)Total quantity of raw material/fuel	202.56									
13.1. Raw Material / Fuel Profile											
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	tri phenyl phosphine	105.96	Tons per Annum		local suppliers/traders	Road,Rail		460	Open Market		
(2.)	Benzyl chloride	175.56	Tons per Annum		local trader/supplier	Road,Rail		300	Open Market		
<u>Baseline Data :</u>											
14.	(a)Period of Base Line Data Collection		FROM 23 Sep 2017 To 22 Dec 2017								
	(b)Season		Post-Monsoon								

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8									
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		
(1.)	SO ₂		Micro Gram per Meter Cube	31.69	5.70	31.37	80		
(2.)	NO _x		Micro Gram per Meter Cube	45.55	9.41	45.30	80		
(3.)	PM ₁₀		Micro Gram per Meter Cube	81.36	50.12	81.04	100		
(4.)	PM _{2.5}		Micro Gram per Meter Cube	58.43	24.97	58.36	60		
14.2. No. of Ground Water monitoring locations : 8									
S. N o.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Oth er Unit	Maximu m Value	Minimu m Value	Desira ble Limit	Maximu m Permissi ble Limit
(1.)	Chloride s			mg/l		183	62.4	250	1000
(2.)	Others	Turbidity		Othe rs	NTU	5.6	2.8	1	5
(3.)	Fluoride			mg/l		0.85	0.3	1	1.5
(4.)	Heavy Metals		Magnesi um	mg/l		82.6	11.7	30	100
(5.)	pH			NA		7.96	7.3	8.5	8.5
(6.)	TSS			mg/l		116	16	0	0
(7.)	TDS			mg/l		1296	324	500	2000
(8.)	Total Hardnes s			mg/l		820	98	200	600
14.3. No. of Surface Water monitoring locations : 6									

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
(1.)	pH		NA		8.95	8.15	B
(2.)	DO		mg/l		5.2	3.9	B
(3.)	COD		mg/l		97.9	12	B
(4.)	BOD		mg/l		28.8	6.9	B
(5.)	Others	TDS	mg/l		1620	208	B

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	47.3	34.2	45
(2.)	Leq(Day)	A-weighted decibels(dB(A))	57.3	40.6	55

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit		Maximum Value	Minimum Value
(1.)	P(Phosphorus)	Milligram per Kilogram		5.36	0.52
(2.)	Electric Conductivity	Millisiemens per Centimetre		3.520	0.235
(3.)	K(Potassium)	Milliequivalents per 100 Gram		26.34	9.32
(4.)	N(Nitrogen)	Others	NOT MEASURED	0	0
(5.)	pH	Others	Not applicable	8.41	7.11

Details of Ground Water Table:

- (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 4.68 To 41.40
- 14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 1.73 To 41.00
- (c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)												
S. N o.	Source	Sou rce Oth er	Requ ired Quan tity	Dista nce from Sour ce		Mode of Trans port	Other Mode of Trans port		Metho d of Water Withdr awal	Letter No.	Da te of Iss ue	Permi tted Quan tity
(1 .)	Ground Water		29.5	0		Pipeli ne			Bore well	21-4/3517/GJ/IND/2018	15 Feb 2018	29.5
15.1. (a)Whether Desalination is proposed No												
16. Waste Water Management(During Operation)												
S. N o.	Type/Sou rce	Quantit y of Waste Water Genera ted (Kilolitr e per Day)	Treatm ent Capacit y (Kilolitr e per Day)	Treatme nt Method	Mode of Dispo sal	Other Mode of Dispo sal	Quantity of Treated Water Used in Recycling/R euse (Kilolitre per Day)	Quantity of Dischar ged Water (Kilolitre per Day)				
(1.)	domestic	0	0	total 1.6 KLD domestic effluent will be generat ed & will be dispose d off into soak pit via septic tank	Others	septic tank / soak pit	0	0				
(2.)	Industrial	0	10	total 8.3 KLD wastewa ter will be generat ed &	Reuse within the Plant & Recycli ng		0					

				treated in ETP followed by condens er system, so 5.4 KLD condens ate will be reused in inudustri al process					
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(a)Total Waste Water Generation 0
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 0

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	process waste (organic)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		116.76	Tons	300	Road		Others	common hazardous waste incineration facility
(2.)	ETP sludge + evaporation residue	Hazardous Waste (as per Hazardous and Other Waste		60	Tons	300	Road		Treatment, Storage and Disposal Facility(T SDF)	

		Manage ment rules 2016)								
(3.)	catalyst waste	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		2.4	To ns	300	Road		Others	CHWIF
(4.)	off- specific ation product	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		0	To ns	300	Road		Others	CHWIF
(5.)	discarde d containe rs	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		21.6	To ns	0	Road		Authorize d Recyclers	
(6.)	process waste (inorgan ic)	Hazardo us Waste (as per Hazardo us and Other Waste		72.96	To ns	300	Road		Treatmen t, Storage and Disposal Facility(T SDF)	

		Manage ment rules 2016)								
(7.)	used oil	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		0.048	To ns	0	Road		Authoriz ed Recyclers	
(8.)	date expired product / raw material	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		0	To ns	300	Road		Others	CHWIF
(9.)	distillati on residue	Hazardo us Waste (as per Hazardo us and Other Waste Manage ment rules 2016)		19.68	To ns	300	Road		Others	CHWIF
(10.)	spent charcoal + spent carbon	Hazardo us Waste (as per Hazardo us and Other Waste		31.92	To ns	300	Road		Others	Commo n Hazard ous waste incinera tion facility

		Manage ment rules 2016)								
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18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5		NA	0	0	0	0	0
(2.)	NOx		Microgram per Meter Cube	45.55	1.63	0.06	45.61	80
(3.)	PM10		Microgram per Meter Cube	81.36	1.63	0.15	81.51	100
(4.)	SO2		Microgram per Meter Cube	31.69	1.63	0.03	31.72	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	stack attached with Boiler	white coal / briquettes	30	1.0	PM10		0.77
(2.)	stack attached with boiler	white coal / briquettes	30	1.0	SO2		0.03
(3.)	stack attached with boiler	white coal / briquettes	30	1.0	NOx		0.16
(4.)	process	-	6	0.5	Others	VOC	-

	stack attache d with process room						
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Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA)) 235
(b)Source UGVCL
19. (c)Uploaded Copy of Agreement Copy of Agreement
(d)Standby Arrangement (Details of DG Sets) DG set of 60 KVA
(e)Stack Height (in m) 10

Land Ownership Pattern:

(a)Forest Land 0
(b)Private Land 0.6077
20. (c)Government Land 0
(d)Revenue Land 0
(e)Other Land 0
Total Land 0.6077

Present Land Use Breakup of the Study Area in Ha:

(a)Agriculture Area 22541
(b)Waste/Barren Land 3138
(c)Grazing/ Community Land 2321
(d)Surface Water Bodies 714
21. (e)Settlements 2181
(f)Industrial 269
(g)Forest 251
(h)Mangroves 0
(i)Marine Area 0
(j)Others : other land 0
Total 31415

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Built Up Area		0.1902	
(2.)	Green belt		0.2085	
(3.)	Others	open area	0.2090	

Total		0.6077			
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>					
23.	23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Critically Polluted Area	none within 10 km radius area	0	N.A.	
(2.)	ESZs	none within 10 km radius area	0	N.A.	
(3.)	Wildlife Corridors	none within 10 km radius area	0	N.A.	
(4.)	WLS	none within 10 km radius area	0	N.A.	
(5.)	NPA	none within 10 km radius area	0	N.A.	
(6.)	Corridors	none within 10 km radius area	0	N.A.	
(7.)	ESAs	none within 10 km radius area	0	N.A.	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		None within 10 km radius area	0	not applicable
(2.)	Archaeological Sites		None within 10 km radius area	0	not applicable
(3.)	Forest		Berna Reserve Forest	11.94	Berna reserve forest is outside 10 km radius

					area from project site
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(a)Whether Noc / Permission from the competent authority is required? No

23.3. (b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 0.6077

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired not applicable

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R Yet To Start

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? Yes

(i)Details of Schedule-I Species Indian Peafowl

(b)Whether conservation plan for Schedule-I Species has been prepared ? Yes

(i)Uploaded copy of conservation plan Copy of conservation plan

(ii)Fund Provision made included in conservation plan

(iii)Period of Implementation 1 to 5 years

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority? No

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? No
29. (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer Area Hathmati river
- (ii)Direction of Water Bodies in Buffer Area South East
- (iii)Distance of Water Bodies in Buffer Area 4.6

Manpower Requirement:

- (a)Permanent Employment-During Construction 0
- (b)Permanent Employment-During Operation 12
31. (c)Temporary Employment- During Construction 0
- (d)Temporary Employment- During Operation 0
- (e)No. of working days 25
- (f)Total Manpower 12

Green Belt in Ha:

- (a)Total Area of Green Belt 0.2085
32. (b)Percentage of Total Project Area 34.31
- (c)No. of Plants to be Planted 300
- (d)Funds Allocated for Plantation 100000

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	social & financial benefits

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. NABET/EIA/1619/RA 0033
- (ii) Name of the EIA Consultant T. R. Associates
- (iii) Address A-401, S.G. Business Hub, B/w. Sola Bhagwat & Gota over bridge, near umiya campus, S. G. Highway, Ahmedabad - 380060
- (iv) Mobile No. 9825371099
- (v) Landline No. 0792745069
- (vi) Email Id adm.trassocaites@gmail.com
- (vii) Category of Accreditation A
- (viii) Sector of Accreditation Industrial Projects - 2
- (ix) Validity of Accreditation 17 Mar 2019

13.7.1.2 The EAC, after presentation, noted the following:-

- The project/activity is covered under category A of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The ToR for the project was granted by the Ministry vide letter dated on 3rd august, 2017. Public hearing was conducted by the State Pollution Control Board on 18th September, 2018.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site.
- The total water requirement is 34.9 cum/day including fresh water requirement of 29.5 cum/day proposed to be met from ground water. The unit obtained permission to abstract ground water of 210 cum/day from State Ground water department.
- Industrial effluent of 8.3 cum/day will be treated through Effluent Treatment Plant to achieve Zero Liquid Discharge. Domestic effluent of 1.6m³/day will be disposed to soak pit.

- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.
- The committee also noted that Schedule-1 Species such as peacock was reported in the study area.

13.7.1.3 The EAC, after detailed deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -

- ii. No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- iii. Height of the stack shall not be less than 30m.
- iv. Solvent management shall be carried out as follows:
 - (i) Reactor shall be connected to chilled brine condenser system.
 - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (iv) Solvents shall be stored in a separate space specified with all safety measures.
 - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- I. Statutory compliance
 - (i) The project proponent shall prepare a Site-Specific Conservation Plan for peacocks and approved by the forest department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report
 - (ii) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
 - (iii) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
 - (iv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- II. Air quality monitoring and preservation
 - (i) The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - (ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
 - (iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area.
 - (iv) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not

exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (v) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (vi) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (vii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. *Water quality monitoring and preservation*

- (i) The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) *Total fresh water requirement shall not exceed 29.5 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- (iv) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (v) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vi) The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. *Noise monitoring and prevention*

- (i) *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- (ii) *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- (iii) *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.*

V. **Energy Conservation measures**

- (i) *The energy sources for lighting purposes shall preferably be LED based.*

VI. **Waste management**

- (i) *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- (ii) *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- (iii) *The company shall undertake waste minimization measures as below:-*
 - (g) *Metering and control of quantities of active ingredients to minimize waste.*
 - (h) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (i) *Use of automated filling to minimize spillage.*
 - (j) *Use of Close Feed system into batch reactors.*
 - (k) *Venting equipment through vapour recovery system.*
 - (l) *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. **Safety, Public hearing and Human health issues**

- (i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

- (ii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (iii) The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- (iv) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (vii) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

VIII. Corporate Environment Responsibility

- (i) *As proposed Rs. 10 lakhs shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the expansion project.*
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually.

VIII. Miscellaneous

- (vi) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (vii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- (viii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (ix) The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (x) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (xi) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (xii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (xiii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (xiv) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (xv) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xvi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xvii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xviii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xix) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xx) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- (xxi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No.13.7.2

Manufacturing of 159 MT/M of Dye and Pigment Intermediates at Plot No. B-31/2, Paithan MIDC by M/s Crystal Surfactants & Chemicals - Environmental Clearance.

[IA/MH/IND2/82242/2018, No.IA-J-11011/66/2018-IA-II(I)]

13.7.2.1: The proposal is for environmental clearance for the proposed manufacturing of 159 MT/M of Dye and Pigment Intermediates at Plot No. B-31/2, Paithan MIDC by M/s Crystal Surfactants & Chemicals. The project activity covered under item 5(f) of the schedule to the EIA

Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	Whether it is a violation case and application is being submitted under Notification No. S.O.804(E) dated 14.03.2017 ?	No
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	M/s Crystal Surfactants & Chemicals
	(b)Name of the Company / Organisation	CRYSTAL SURFACTANTS AND CHEMICALS
	(c)Registered Address	113, Labh Chamber, Station road, Aurangabad,Aurangabad,Maharashtra-431148
	(d)Legal Status of the Company	Others
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Govardhan Dwarkadas Agrawal
	(b)Designation (Owner/ Partner/ CEO)	Partner
2.	(c)Address	Plot. No. B-31/2, MIDC area Paithan, Dist.- Auranbagad,,Aurangabad,Aurangabad,Maharashtra -431148
	(d)Pin code	431148
	(e)E-mail	crystal.pcona@gmail.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs)
	(b)Category	A
3.	(c)Proposal Number	IA/MH/IND2/82242/2018
	(d)Master Proposal Number(Single Window)	SW/82238/2018
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Fresh EC
	<u>Location of the Project:</u>	
4.	(a)Plot/Survey/Khasra No.	At Plot No. B-31/2, MIDC Paithan, Tal. Paithan, Di
	(b)Pincode	431107
	(c)Bounded Latitudes (North)	FROM 19.540561 To 19.541128
	(d)Bounded Longitudes (East)	FROM 75.385322 To 75.386061

(e) Survey of India Topo Sheet No. 47M06/47M07

5. (a) Number of States in which Project will be Executed 1
(b) Main State of the project Maharashtra

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Maharashtra	Aurangabad	Paithan	Paithan MIDC

Details of Terms of Reference (ToR):

- (a) MoEF&CC / SEIAA File Number No. IA-J-11011/66/2018-IA-II(I)
6. (b) Date of Apply of TOR 20 Apr 2018
(c) Date of Issue of TOR / Standard ToR 24 May 2018

Details of Public Consultation:

- (a) Whether the Project Exempted from Public Hearing? Yes
(b) Reason Project Located in Notified Industrial Area {MIDC}

8. **Details of Project Configuration/Product:**

8.1. **Project Configuration**

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Dye & pigment intermediates	1908 TPA	NA

8.2. **Product**

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Mode of Transport of Product
(1.)	4- Chloro 2-Nitro Aniline	360	Tons per Annum	Road
(2.)	4- Nitro -2-Chloro Aniline	240	Tons per Annum	Road
(3.)	5- Chloro-2-Nitro Aniline	240	Tons per Annum	Road
(4.)	4- Nitro-m-Phenylene Di-amine	24	Tons per Annum	Road

(5.)	Fenbendazole	240	Tons per Annum		Road	
(6.)	Albendazole	240	Tons per Annum		Road	
(7.)	2- Nitro Aniline	300	Tons per Annum		Road	
(8.)	2-Amino 3-chlro 5-trifluoro methyl pyridine	144	Tons per Annum		Road	
(9.)	8-amino Quinaldine	120	Tons per Annum		Road	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):**

Details Not Applicable

Project Cost:

- (a) Total Cost of the Project at current price level (in Crores) 7.189
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 0.75
10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.1437
- (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 0.075

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification ?** Yes

a) Protected areas notified under the wildlife (Protection) Act, 1972 Yes

12. **Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?** No

Raw Material / Fuel Requirement:

13. (a) Proposed quantity of raw material/fuel 0
- (b) Existing quantity of raw N/A

material/fuel (c)Total quantity of raw material/fuel 0								
13.1. Raw Material / Fuel Profile								
S. No.	Raw Material / Fuel	Quantity	Unit	Source)	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage	
(1.)	ammonia	300.672	Tons per Annum	Local Market	Road	50	Open Market	
(2.)	Methanol	62.88	Tons per Annum	Indigenou s	Road	500	Open Market	
(3.)	3, 4 Di Chloro Nitro Benzene	267.12	Tons per Annum	Indigenou s	Road	500	Open Market	
(4.)	2, 3 DiChloro 5 (Trifluoromethyl) Pyridine	158.4	Tons per Annum	Indigenou s	Road	500	Open Market	
(5.)	Acetic Acid	480	Tons per Annum	Indigenou s	Road	500	Open Market	
(6.)	Coal	5760	Tons per Annum	Local Market	Road	50	Open Market	
(7.)	HSD Fuel	1.8	Kilo Litre per Day	Local Market	Road	50	Open Market	
(8.)	2,4 Dichloro Nitro Benzene	297.24	Tons per Annum	Indigenou s	Road	500	Open Market	

(9.)	Ortho Nitro Chloro Benzene	342.6	Tons per Annum	Indigenou s	Road	500	Open Market		
(10.)	8-Chloro Quinaldine	135	Tons per Annum	Indigenou s	Road	500	Open Market		
(11.)	4 Phenyl Sulphonyl Benzene 1, 2 Diamine	346.56	Tons per Annum	Indigenou s	Road	500	Open Market		
(12.)	Cyano Carbamate	280.32	Tons per Annum	Indigenou s	Road	500	Open Market		
(13.)	2, 5 Dichloro Nitro Benzene	400.68	Tons per Annum	Indigenou s	Road	500	Open Market		

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Mar 2018 To 31 May 2018
(b) Season Summer

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 9

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	64.87	30.59	63.2992	100
(2.)	PM2.5	Micro Gram per Meter Cube	36.63	16.03	34.4561	60
(3.)	NOx	Micro Gram per Meter Cube	38.54	16.90	34.44	80
(4.)	SO2	Micro Gram per Meter Cube	27.48	9.59	26.6120	80

14.2. No. of Ground Water monitoring locations : 9

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
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(1.)	pH			NA		7.52	6.67	8.5	0
(2.)	TSS			mg/l		34.60	0.40	0	0
(3.)	Total Hardness			mg/l		536.60	103.00	200	600
(4.)	Chlorides			mg/l		155.95	41.99	250	1000
(5.)	Fluoride			mg/l		0.3	0.01	1	1.5
(6.)	Heavy Metals		Arsenic	mg/l		0	0	0.05	0
(7.)	TDS			mg/l		634.05	134.19	500	2000
14.3. No. of Surface Water monitoring locations : 8									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		NA		7.90	6.89	A		
(2.)	DO		mg/l		6.80	1.20	A		
(3.)	COD		mg/l		10	0	A		
(4.)	BOD		mg/l		2.80	2.40	A		
14.4. No. of Ambient Noise monitoring locations : 9									
S. No.	Parameter	Unit	Maximum Value		Minimum Value		Prescribed Standard		
(1.)	Leq(Day)	A-weighted decibels(dB(A))	67.6647		51.7941		75		
(2.)	Leq(Night)	A-weighted decibels(dB(A))	61.6428		41.44		70		
14.5. No. of Soil Sample Monitored locations : 9									
S. No.	Parameter	Unit	Other Unit		Maximum Value		Minimum Value		
(1.)	pH	Others	NA		8.16		7.09		
(2.)	K(Potassium)	Milligram per Kilogram			596.3		196		
(3.)	Electric	Millisiemens			0.67		0.19		

	Conductivity	per Centimetre			
(4.)	N(Nitrogen)	Milligram per Kilogram		221.5	125.6
(5.)	P(Phosphorus)	Milligram per Kilogram		12	5.3

Details of Ground Water Table:

- (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 12.8 To 15
- 14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 10.9 To 7.63
- (c)Whether Ground Water Intersection will be there ? NA

15. Details of Water Requirement (During Operation)

S. N o.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Others	MIDC Paithan	38.50	0	Pipeline	Others	MIDC Paithan	In Process	13 Oct 2018	40

- 15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. N o.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	Domestic	2.5	0	Spetik Tank with Soak Pit	Others	Used for Land irrigation	2.5	0

(2.)	Boiler Steam Generation	5.5	0	Steam Condensate Recycled	Reuse within the Plant & Recycling		5.5	
(3.)	General House Keeping	0.5	0	Collected, distilled and recycled	Reuse within the Plant & Recycling		0.5	
(4.)	Process	9	0	Used in process and distilled. It is redistilled and recycled	Reuse within the Plant & Recycling		9	0
(5.)	Industrial Cooling	0.5	0	Evaporation loss	Others	Evaporation loss	0.5	0

(a)Total Waste Water Generation 18

16.1. (b)Total Discharged Water 0

(c)Total Reused Water 18

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal
(1.)	Cotton Waste (33.2)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	5	Tons	180	Road		Treatment, Storage and Disposal Facility(TSDF)
(2.)	Discarded Container	Hazardous Waste (as	1.2	Tons	180	Road		Treatment, Storage

	Barrels (33.1)	per Hazardous and Other Waste Management rules 2016)						and Disposal Facility(TS DF)	
(3.)	Spent Oil Residue containing oil (5.1)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	20	Tons	180	Road		Treatment, Storage and Disposal Facility(TS DF)	
(4.)	Off Specification Products (28.4)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	0.12	Tons	180	Road		Treatment, Storage and Disposal Facility(TS DF)	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10		Microgram per Meter Cube	64.87	0.8	1.8	66.67	100
(2.)	NOx		Microgram per Meter Cube	0	0	0	0	0
(3.)	PM2.5		Microgram per Meter Cube	36.63	0.8	0.7	37.33	60
(4.)	SO2		Microgram	27.48	0.8	0.1	27.5	80

)			am per Meter Cube				8	
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18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Boiler (0.8 TPH)	Coal	30	0.5	Others	PM10 & SO	100 & 80
(2.)	DG Set (125 KVA)	HSD	30	0.3	Others	PM10 & SO2	100 & 80

Power Requirement:

19. (a)Quantity (Kilo Volt Amps (kVA)) 200
 (b)Source MSEDCL
 (c) Agreement Yes
 (d)Standby Arrangement (Details of DG Sets) 150 KVA (DG Set)
 (e)Stack Height (in m) 30

Land Ownership Pattern:

20. (a)Forest Land 0
 (b)Private Land 0
 (c)Government Land 0
 (d)Revenue Land 0
 (e)Other Land 0.4
Total Land 0.4

Present Land Use Breakup of the Study Area in Ha:

21. (a)Agriculture Area 22185
 (b)Waste/Barren Land 0
 (c)Grazing/ Community Land 0
 (d)Surface Water Bodies 7682
 (e)Settlements 1263
 (f)Industrial 285
 (g)Forest 0
 (h)Mangroves 0
 (i)Marine Area 0
 (j)Others : NA 0
Total 31415

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks	
(1.)	Built Up Area		1.52	Utilities, Storage & ETP	
(2.)	Green belt		1.204		
(3.)	Others	Road & Parking	1.029		
Total			3.753		
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Critically Polluted Area	Not Applicable	0	0	
(2.)	WLS	Not applicable	0	0	
(3.)	NPA	Jayakwadi Bird Sanctuary	2	0	
(4.)	Corridors	Not Applicable	0	0	
(5.)	ESAs	Not Applicable	0	0	
(6.)	Wildlife Corridors	Not applicable	0	0	
(7.)	ESZs	Jayakwadi Bird Sanctuary ESZ	1.5	0	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		Not Applicable	0	0
(2.)	Defence Installations		Not Applicable	0	NA

(3.)	Archaeological Sites		Not Applicable	0	NA
23.3.	(a)Whether Noc / Permission from the competent authority is required?	No			
	(b)Whether NBWL recommendation is required?	No			
	<u>Forest Land:</u>				
24.	Whether any Forest Land involved?	No			
	<u>Tree Cutting:</u>				
25.	(a)No. of Trees Cut for the Project (if Forest Land not Involved)	0			
	(b)Details of Tree Cutting and Planting of Trees	Not Applicable			
	<u>Land Acquisition Status:</u>				
26.	(a)Acquired Land(Ha)	0.3938			
	(b)Land yet to be acquired(Ha)	0			
	(c)Status of Land acquisition if not acquired	0			
	<u>Rehabilitation and Resettlement (R&R):</u>				
27.	(a)No. of Villages	0			
	(b)No. of Households	0			
	(c)No. of PDFs (Project Displaced Families)	0			
	(d)No. of PAFs (Project Affected Families)	0			
	(e)Funds Allocated for R&R(in Rs)	0			
	(f)Status of R&R	In-Progress			
	<u>Details of Presence of Schedule-I Species:</u>				
28.	(a)Whether there is Presence of Schedule-I Species ?	Yes			
	(i)Details of Schedule-I Species	Indian peafowl, white stork			
	(b)Whether conservation plan for Schedule-I Species has been prepared ?	Yes			
	(i)Uploaded copy of conservation plan	Copy of conservation plan			
	(ii)Fund Provision made	10 Lakhs			
	(iii)Period of Implementation	5 Years			

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

29. (a)Whether there is Presence of Water Bodies in Core Area ? Yes
 (i)Details of Water Bodies in Core Area Nath Sagar Dam
 (b)Whether there is Diversion Required ? No
 (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

30. (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
 (i)Details of Water Bodies in Buffer Area Nath Sagar Dam
 (ii)Direction of Water Bodies in Buffer Area South West
 (iii)Distance of Water Bodies in Buffer Area 2

Manpower Requirement:

31. (a)Permanent Employment-During Construction 5
 (b)Permanent Employment-During Operation 10
 (c)Temporary Employment- During Construction 5
 (d)Temporary Employment- During Operation 20
 (e)No. of working days 300
 (f)Total Manpower 40

Green Belt in Ha:

32. (a)Total Area of Green Belt 0.13
 (b)Percentage of Total Project Area 32.50
 (c)No. of Plants to be Planted 150
 (d)Funds Allocated for Plantation 4

33. **Project Benefits**

S. No.	Type of Project Benefits	Details of Project Benefits	
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(1.)	Social	1. Total 40 persons are expected to employed. 2. The CER budget shall be Rs.14.37 Lakhs. {OM/F.No.22-65/2017-IA.III Dated on 1 May 2018} 3. Company will spend CER fund on Activity like; Water Conservation, Tree Plantation , Education & Skill Development, Other Social Welfare Activities
(2.)	Financial	1. Direct Revenue Earning to the National & State Exchequer in the form of GST {SGST/CGST} 2.Export Potential 3.Economic Developments
(3.)	Environmental	1. Green belt Development 2. Cleaner Production should be beneficial for Human health & environment. 3. Products are produced using Eco-friendly, cost effective & Safe.

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a)Have you hired Consultant for preparing document? Yes
- (i)Accreditation No. 133
- (ii)Name of the EIA Consultant sd engineering services pvt ltd
- (iii)Address 14, Age Arcade, New Osamnapura, Near Sant Eknath rang Manidr, Aurangbad
- (iv)Mobile No. 9960634559
- (v)Landline No. 0240233362
- (vi)Email Id deepak.sanghai@gmail.com
- (vii)Category of Accreditation A

13.7.2.1 During deliberations, the EAC noted the following: -

- The project/activity is covered under category B of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at SEIAA. Due to applicability of General condition (Jayakwadi Bird Sanctuary within 5 km) the project requires appraisal by sectoral Expert Appraisal Committee (EAC) in the Ministry.
- The ToR for the project was granted by the Ministry vide letter dated on 24th May, 2018. Public hearing is exempted as the project site is located inside the notified industrial area.
- The Jayakwadi Bird Sanctuary is at a distance of 1.7 km. Schedule-1 species such as Indian Peafowl and white stork were reported in the study area
- The total water requirement is 38.5 cum/day including fresh water requirement of 23.5 cum/day proposed to be met from MIDC water supply.
- Effluent of 17.5 cum/day will be generated & effluent generated from process will be subjected by-Product Recovery. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.

13.7.2.3 The EAC, after detailed deliberations, *recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

- i. *No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- ii. *Height of the stack shall not be less than 30m.*
- iii. *Solvent management shall be carried out as follows:*
 - (i) *Reactor shall be connected to chilled brine condenser system.*
 - (ii) *Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - (iii) *The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - (iv) *Solvents shall be stored in a separate space specified with all safety measures.*
 - (v) *Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (vi) *Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (vii) *All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- I. *Statutory compliance*
 - (i) *The project proponent shall prepare a Site-Specific Conservation Plan for Indian peafowl and white stork and approved by the forest department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report*
 - (ii) *The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*

- (iii) *The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- (iv) *The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*

II. *Air quality monitoring and preservation*

- (i) The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- (ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- (iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area.
- (iv) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (v) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (vi) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (vii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. *Water quality monitoring and preservation*

- (i) The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) *Total fresh water requirement shall not exceed 23.5 cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- (iv) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (v) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vi) The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. *Noise monitoring and prevention*

- (i) *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- (ii) *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*

- (iii) *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.*

V. Energy Conservation measures

- (i) *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- (i) *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- (ii) *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- (iii) *The company shall undertake waste minimization measures as below:-*
 - (a) *Metering and control of quantities of active ingredients to minimize waste.*
 - (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (c) *Use of automated filling to minimize spillage.*
 - (d) *Use of Close Feed system into batch reactors.*
 - (e) *Venting equipment through vapour recovery system.*
 - (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Safety, Public hearing and Human health issues

- (i) *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- (ii) *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- (iii) *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- (iv) *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- (v) *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*
- (vi) *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- (vii) *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places*

VIII. Corporate Environment Responsibility

- (i) *As proposed 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the expansion project.*
- (ii) *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*

- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually.

VIII. Miscellaneous

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Agenda No.13.7.3

Proposed Project for manufacturing of Fine Chemicals and Agro Intermediates (1555 TPM) at Plot No. Z/109, SEZ Dahej, Tehsil: Vagra, District Bharuch (Gujarat) by M/s Neogen Chemicals Limited- Environmental Clearance

[IA/GJ/IND2/100557/2019, IA-J-11011/117/2019-IA-II(I)]

13.7.3.1: The proposal is for environmental clearance for the proposed project for manufacturing of Fine Chemicals and Agro Intermediates (1555 TPM) at Plot No. Z/109, SEZ Dahej, Tehsil: Vagra, District Bharuch (Gujarat) by M/s Neogen Chemicals Limited. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Neogen Chemicals Ltd
	(b)Name of the Company / Organisation	NEOGEN CHEMICALS LIMITED
1.	(c)Registered Address	1002, 10th floor, Dev Corporate Bldg, Pokharan Road no 2Khopat, Thane -400601, Maharastra.,Thane,Maharashtra-400601
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	HARIN HARISH KANANI
	(b)Designation (Owner/ Partner/ CEO)	ExecutiveDirector
2.	(c)Address	1002, 10th floor, Dev Corporate Bldg, Pokharan Road no 2Khopat, Thane -400601, Maharastra.,Thane,Thane,Maharashtra-400601
	(d)Pin code	400601
	(e)E-mail	c.gupta@neogenchem.com

Category of the Project/Activity as per Schedule of EIA Notification,2006:

- (a)Project/Activity 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
3. (b)Category A
- (c)Proposal Number IA/GJ/IND2/100557/2019
- (d)Master Proposal Number(Single Window) SW/116499/2019
- (e)EAC concerned (for category A Projects only) Industrial Projects - 2
- (f)Project Type Fresh EC

Location of the Project:

- (a)Plot/Survey/Khasra No. Plot No. Z/109, SEZ Dahej
- (b)Pincode 392110
4. (c)Bounded Latitudes (North) FROM 21.680686 To 21.682869
- (d)Bounded Longitudes (East) FROM 72.545039 To 72.547158
- (e)Survey of India Topo Sheet No. F43M10
5. (a)Number of States in which Project will be Executed 1
- (b)Main State of the project Gujarat

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Bharuch	Vagra	Dahej SEZ

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/117/2019-IA-II(I)
6. (b)Date of Apply of TOR 27 Mar 2019
- (c)Date of Issue of TOR / Standard ToR 28 Apr 2019

Details of Public Consultation:

7. (a)Whether the Project Exempted from Public Hearing? Yes
- (b)Reason Neogen Chemicals Ltd will be situated at Dahej-SEZ

8. **Details of Project Configuration/Product:**

8.1. Project Configuration						
S. No.	Plant/Equipment/Facility	Configuration	Remarks			
(1.)	Cooling plant	1000 TR and 600 TR	2 nos			
(2.)	Boiler	2 TPH each	3 nos			
(3.)	D G set	250 kva each	3 nos			
(4.)	Chilling plant	250 TR	1 nos			
8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit		Mode of Transport of Product	
(1.)	Bromination of Organic Acids and Esterification	3500	Tons per Annum		Road	
(2.)	Grignards Formation from Organic Halides	1000	Tons per Annum		Road	
(3.)	Addition of Halogen and Halogen Acids across Double Bonds	2500	Tons per Annum		Road	
(4.)	Bromination and Chlorination of Alcohols	3500	Tons per Annum		Road	
(5.)	Dehydrohalogenation of Organic Halides with or without functional Group	1000	Tons per Annum		Road	
(6.)	2-Cyclopropyl 6-Methyl Phenol	60	Tons per Annum		Road	
(7.)	R&D	600	Tons per Annum		Road	
(8.)	Halogen Exchange Reactions	2000	Tons per Annum		Road	
(9.)	Bromination or Chlorination of Cyclic and Aromatic Compounds with or Without Functional Groups	2500	Tons per Annum		Road	
(10.)	Advance Intermediates from Category 1 to 7	2000	Tons per Annum		Road	
9.	<u>In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) /</u>					

Change of Product Mix under Clause 7(ii):**Details Not Applicable****Project Cost:**

- (a) Total Cost of the Project at current price level (in Crores) 150
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 8.25
10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 2.25
- (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 4.5

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification ?** No

12. **Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?** No

Raw Material / Fuel Requirement:

- (a) Proposed quantity of raw material/fuel 18660
13. (b) Existing quantity of raw material/fuel N/A
- (c) Total quantity of raw material/fuel 18660

13.1. Raw Material / Fuel Profile

S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	attached as pdf	18660	Tons per Annum	local	Road	100	Open Market		

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Mar 2019 To 31 May 2019

(b)Season			Summer						
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8									
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		
(1.)	SO2		Micro Gram per Meter Cube	23.5	10.9	18.6	80		
(2.)	NOx		Micro Gram per Meter Cube	27.7	13.3	22.2	80		
(3.)	PM10		Micro Gram per Meter Cube	83.5	58.8	76.8	100		
(4.)	PM2.5		Micro Gram per Meter Cube	45.6	28.3	39.8	60		
14.2. No. of Ground Water monitoring locations : 5									
S. No .	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	Chlorides			mg/l		2845	1161	250	1000
(2.)	TSS			mg/l		16	10	0	0
(3.)	Fluoride			mg/l		0.58	0.5	1	1.5
(4.)	TDS			mg/l		5342	2830	500	2000
(5.)	pH			mg/l		7.9	7.3	6.5	8.5
(6.)	Total Hardness			mg/l		1207	362	300	600
14.3. No. of Surface Water monitoring locations : 7									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		mg/l		7.9	7.3	A		
(2.)	DO		mg/l		5.9	4.6	B		
(3.)	BOD		mg/l		19.3	11.4	D		

(4.)	COD		mg/l		40.6	24.2	D		
14.4. No. of Ambient Noise monitoring locations : 9									
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard				
(1.)	Leq(Day)	A-weighted decibels(dB(A))	56.2	45.1	75				
(2.)	Leq(Night)	A-weighted decibels(dB(A))	50.5	39.2	70				
14.5. No. of Soil Sample Monitored locations : 6									
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value				
(1.)	K(Potassium)	Milligram per Kilogram		339	175				
(2.)	P(Phosphorus)	Milligram per Kilogram		62	12				
(3.)	Electric Conductivity	Others	dS/m	5.3	4.7				
(4.)	N(Nitrogen)	Milligram per Kilogram		131	116				
(5.)	pH			8.3	7.8				
<u>Details of Ground Water Table:</u>									
(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 20									
14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 5 To 8									
(c)Whether Ground Water Intersection will be there ? NA									
15. Details of Water Requirement (During Operation)									
S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Others	GIDC supply	522	4	Pipeline	GIDC supply	NCL/2014/906/464	12 Apr 2018	522

15.1. (a)Whether Desalination is proposed		No						
16. Waste Water Management(During Operation)								
S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)	
(1.)	DOMESTIC	40	40	STP	Green Belt Renewal Plant	40		
(2.)	INDUSTRIAL	173	200	ETP	Discharge into Seawater Body		173	
(a)Total Waste Water Generation 213 16.1. (b)Total Discharged Water 173 (c)Total Reused Water 40								
17. Solid Waste Generation/Management								
S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	ETP waste	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	600	Tons	75	Road	Treatment, Storage and Disposal Facility(TSDF)	
(2.)	Process/distillation residueant	Hazardous Waste (as per Hazardous and	13200	Tons	75	Road	Others	disposal at CHWIF or co-processi

		Other Waste Manage ment rules 2016)						ng?
(3.)	Used Lubricating Oil residueant	Hazardou s Waste (as per Hazardou s and Other Waste Manage ment rules 2016)	1	Kilolit re	45	Road	Authorized Recyclers	
(4.)	Discarded containers/ barrels/ liners	Hazardou s Waste (as per Hazardou s and Other Waste Manage ment rules 2016)	906	Tons	55	Road	Authorized Recyclers	
(5.)	Spent H2SO4	Hazardou s Waste (as per Hazardou s and Other Waste Manage ment rules 2016)	1560	Tons	75	Road	Others	sold to actual end users under Haz Waste Rules 9.
(6.)	Sodium hypochlorite	Hazardou s Waste (as per Hazardou s and Other Waste Manage ment	312	Tons	75	Road	Others	sold to actual end users under Haz Waste Rules 9.

		rules 2016)						
(7.)	Liquor of HBr (<30%)residueant	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	8112	Tons	75	Road	Others	sold to actual end users under Haz Waste Rules 9.
(8.)	Acetic acid	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	300	Tons	75	Road	Others	sold to actual end users under Haz Waste Rules 9.

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10	Microgram per Meter Cube	70.5	1.41	1.49	72	100
(2.)	NOx	Microgram per Meter Cube	18.8	1.41	0.72	19.6	80
(3.)	PM2.5	Microgram per Meter Cube	34.9	1.41	1.49	36.4	60
(4.)	SO2	Microgram per Meter	15.4	1.41	1.2	16.7	80

		Cube					
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18.2. Stack Details							
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	D G set (250 KVA each x 3 nos)	Diesel	21	0.5	Others	SPM, SO ₂ , NO _x	00
(2.)	Halogen Specific Reaction Plant (4 nos)	none	16	0.375	Others	HBr, HCl, Br ₂ , Cl ₂	00
(3.)	Boiler (3 nos.) (2 TPH each)	PNG/F O	40	0.6	Others	SPM, SO ₂ , NO _x	00
(4.)	Work place area (2 nos)	none	16	0.375	Others	HBr, HCl, Br ₂	00
(5.)	Common Reaction & Multi-purpose Plant (4 nos)	none	16	0.375	Others	HBr, HCl, Br ₂ , Cl ₂ , SO ₂	00
(6.)	Bromine scrubber	none	16	0.375	Others	HBr, Br ₂	00

Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA)) 2000

(b)Source Dakshin Gujarat Vij Company Limited

19. (c)Uploaded Copy of Agreement Not Applicable

(d)Standby Arrangement (Details of DG Sets) (3 nos of 250 kVA each)

(e)Stack Height (in m) 21

Land Ownership Pattern:

20. (a)Forest Land 0

	(b)Private Land	5		
	(c)Government Land	0		
	(d)Revenue Land	0		
	(e)Other Land	0		
	Total Land	5		
	<u>Present Land Use Breakup of the Study Area in Ha:</u>			
	(a)Agriculture Area	1296		
	(b)Waste/Barren Land	3521		
	(c)Grazing/ Community Land	0		
	(d)Surface Water Bodies	24106		
21.	(e)Settlements	478		
	(f)Industrial	1852		
	(g)Forest	0		
	(h)Mangroves	0		
	(i)Marine Area	0		
	(j)Others : Transportation	192		
	Total	31445		
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Green belt		1.65	
(2.)	Main Plant		0.98	
(3.)	Built Up Area		0.81	Admin, Utilities, Tanks farms, ETP etc
(4.)	Others	Internal Roads, Parking & Margin	1.56	Internal Roads, Parking & Margin
Total			5	
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>			
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks

(1.)	Critically Polluted Area	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(2.)	ESZs	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(3.)	WLS	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(4.)	NPA	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(5.)	ESAs	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(6.)	Wildlife Corridors	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(7.)	Corridors	NONE WITHIN 10 KM	00	NONE WITHIN 10 KM

23.2. Details of Environmental Sensitivity :

S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(2.)	Archaeological Sites		NONE WITHIN 10 KM	00	NONE WITHIN 10 KM
(3.)	Defence Installations		NONE WITHIN 10 KM	00	NONE WITHIN 10 KM

- 23.3. (a)Whether Noc / Permission from the competent authority is required? No
- (b)Whether NBWL recommendation is required? No

24. Forest Land:

	Whether any Forest Land involved?	No
	<u>Tree Cutting:</u>	
25.	(a)No. of Trees Cut for the Project (if Forest Land not Involved)	Not Applicable
	(b)Details of Tree Cutting and Planting of Trees	Not Applicable
	<u>Land Acquisition Status:</u>	
	(a)Acquired Land(Ha)	5
26.	(b)Land yet to be acquired(Ha)	00
	(c)Status of Land acquisition if not acquired	00
	<u>Rehabilitation and Resettlement (R&R):</u>	
	(a)No. of Villages	00
	(b)No. of Households	00
27.	(c)No. of PDFs (Project Displaced Families)	00
	(d)No. of PAFs (Project Affected Families)	00
	(e)Funds Allocated for R&R(in Rs)	00
	(f)Status of R&R	Completed
	<u>Details of Presence of Schedule-I Species:</u>	
	(a)Whether there is Presence of Schedule-I Species ?	No
28.	(b)Whether conservation plan for Schedule-I Species has been prepared ?	No
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	No
	<u>Details of Presence of Water Bodies in Core Area:</u>	
	(a)Whether there is Presence of Water Bodies in Core Area ?	Yes
29.	(i)Details of Water Bodies in Core Area	Lakhigam, Ambheta, Jageshwar ponds
	(b)Whether there is Diversion Required ?	No
	(c)Whether permission has been obtained from competent authority ?	No
30.	<u>Details of Presence of Water Bodies in Buffer Area:</u>	

	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes
	(i)Details of Water Bodies in Buffer Area	Estuary of Narmada river
	(ii)Direction of Water Bodies in Buffer Area	South West
	(iii)Distance of Water Bodies in Buffer Area	7
	<u>Manpower Requirement:</u>	
	(a)Permanent Employment-During Construction	0
	(b)Permanent Employment-During Operation	0
31.	(c)Temporary Employment- During Construction	100
	(d)Temporary Employment- During Operation	250
	(e)No. of working days	300
	(f)Total Manpower	350
	<u>Green Belt in Ha:</u>	
	(a)Total Area of Green Belt	1.65
32.	(b)Percentage of Total Project Area	33.00
	(c)No. of Plants to be Planted	3188
	(d)Funds Allocated for Plantation	2500000
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	CER and Employment
(2.)	Financial	Tax payment to govt
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<u>Details of Court Cases:</u>		
36.	(a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ?	No
37.	<u>Details of Direction Issued under Environment (Protection) Act / Air</u>	

(Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:

(a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

38. (a) Have you hired Consultant for preparing document? Yes
(i) Accreditation No. NABET/EIA/1619/RA0084
(ii) Name of the EIA Consultant San Envirotech Pvt. Ltd.
(iii) Address 424, Medicine Market, Paldi Cross Road, Ahmedabad-380006, Gujarat??SWVD8????
(iv) Mobile No. 9825007201
(v) Landline No. 0792658307
(vi) Email Id mahendra.sepl@gmail.com
(vii) Category of Accreditation A
(viii) Sector of Accreditation Industrial Projects - 2
(ix) Validity of Accreditation 23 Dec 2019

13.7.3.1 During deliberations, the EAC noted the following: -

- The project/activity is covered under category B of item 5(f) 'Synthetic organic chemical industry' and category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The standard ToR for the project was granted by the Ministry on 28th April, 2019. Public hearing is exempted as the project site is located inside the notified industrial area.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site.
- The total water requirement is 562 cum/day including fresh water requirement of 357 cum/day proposed to be met from GIDC water supply.
- Industrial effluent of 173 KLD will be treated in ETP having primary, primary-secondary-tertiary treatment units. After treatment, effluent will pass through RO, RO permeate will be recycle and reject will be evaporate in MEE and ATFD. Condensate water recycle and salt will be disposed off at approved TSDF site. Domestic wastewater (40 KLD) will be treated in STP and treated water will be utilized for Greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

13.7.3.2 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -

A. Specific Conditions:

- i. No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- ii. No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having $LD_{50} < 100$ mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- iii. Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

B. General Conditions:

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within

permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.*
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with*

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)*
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).*
- iii. Total fresh water requirement shall not exceed 357 cum/day, proposed to be met from GIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.*
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.*

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time*

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- iii. The company shall undertake waste minimization measures as below:-*
 - a. Metering and control of quantities of active ingredients to minimize waste.*
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - c. Use of automated filling to minimize spillage.*
 - d. Use of Close Feed system into batch reactors.*
 - e. Venting equipment through vapour recovery system.*
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Green Belt

- i. The green belt of at least 4-5m width (two rows) shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least Rs. 2.25 Crores shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant

offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010

Agenda No.13.7.4

Proposed Dyes Manufacturing Unit at Survey No. 358, Vaduchi Mandir Road, Lunej Khambhat, Anand, Gujarat, (Gujarat) by M/s Shree Sai Industries - Environmental Clearance

[IA/GJ/IND2/91773/2019, IA-J-11011/19/2019-IA-II(I)]

13.7.4.1: The proposal is for environmental clearance for the proposed Dyes Manufacturing Unit at Survey No. 358, Vaduchi Mandir Road, Lunej Khambhat, Anand, Gujarat, (Gujarat) by

M/s Shree Sai Industries. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	PROPOSED DYES MANUFACTURING UNIT
	(b)Name of the Company / Organisation	SHREE SAI INDUSTRIES
1.	(c)Registered Address	Survey No. 358, Vaduchi Mandir Road, Lunej Khambhat, Anand, Gujarat,Ahmedabad,Gujarat-382445
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Sureshbhai Motiram Patel
	(b)Designation (Owner/ Partner/ CEO)	Proprietor
2.	(c)Address	132,Karma Estate, Trikampura Patia,Phase-III, GIDC, Vatva,,Daskroi,Ahmedabad,Gujarat-382445
	(d)Pin code	382445
	(e)E-mail	smppatel1968@gmail.com
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk
	(b)Category	A
3.	(c)Proposal Number	IA/GJ/IND2/91773/2019
	(d)Master Proposal Number(Single Window)	SW/116534/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Fresh EC
	<u>Location of the Project:</u>	
	(a)Plot/Survey/Khasra No.	Survey No. 358, Vaduchi Mandir Road, Village: Lune
4.	(b)Pincode	388620
	(c)Bounded Latitudes (North)	FROM 22.344313 To 22.344916
	(d)Bounded Longitudes (East)	FROM 72.57962 To 72.580106
	(e)Survey of India Topo Sheet No.	Environmental Information Center

5.	(a)Number of States in which Project will be Executed	1						
	(b)Main State of the project	Gujarat						
Details of State(s) of the project								
S. No.	State Name	District Name	Tehsil Name	Village Name				
(1.)	Gujarat	Anand	Khambhat	Lunej				
<u>Details of Terms of Reference (ToR):</u>								
	(a)MoEF&CC / SEIAA File Number IA-J-11011/19/2019-IA-II(I)							
6.	(b)Date of Apply of TOR	21 Jan 2019						
	(c)Date of Issue of TOR / Standard ToR	26 Feb 2019						
<u>Details of Public Consultation:</u>								
	(a)Whether the Project Exempted from Public Hearing?	No						
7.	(b)Whether details of Public Hearing available?	Yes						
	(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above	Yes						
7.1. Details of Public Hearing								
S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer	
1	Date of Advertisement : 12 Jun 2019	Date : 15 Jul 2019 Distance of Public Hearing Venue from	22 Gaa m Levu va Pati dar Sam aj Ni Wad i, Pres s	State : Gujarat District : Anand Tehsil : Khamb hat Village : Khamb hat	119	Local Employment, Tree Plantation, Infrastructure facility, etc...	District Collector	

		the Propo sed Projec t :	Ro ad					
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8. **Details of Project Configuration/Product:**

8.1. **Project Configuration**

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Manufacturing Plant	Dyes	65 MT/Month

8.2. **Product**

S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Dyes	780	Tons per Annum		Road	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Details of Consent to Operate

- 9.1.
- (i) Whether Consent to operate obtained ? NA
 - (ii) Copies of all Consent to operate obtained since inception NA
 - (iii) Date of Issue 31 May 2019
 - (iv) Valid Upto 30 May 2026
 - (v) File No. GPCB/AND-CTE-290/PCB ID-70091
 - (vi) Application No. GPCB/AND-CTE-290/PCB ID-70091

Project Cost:

- 10.
- (a) Total Cost of the Project at current price level (in Crores) 2
 - (b) Funds Allocated for Environment Management (Capital) (in Crores) 0.5
 - (c) Funds Allocated Towards CER (Corporate Environment) 0.04

Responsibility) (in Crores)											
(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	0.6										
11. Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No										
12. Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No										
<u>Raw Material / Fuel Requirement:</u>											
(a) Proposed quantity of raw material/fuel	1200										
13. (b) Existing quantity of raw material/fuel	N/A										
(c) Total quantity of raw material/fuel	1200										
13.1. Raw Material / Fuel Profile											
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	Coal	720	Tons per Annum		Local Market	Road		15	Open Market		
(2.)	Sulfuric Acid (98%)	100	Tons per Annum		Local Market	Road		15	Open Market		
<u>Baseline Data :</u>											
14.	(a) Period of Base Line Data Collection					FROM 01 Oct 2017 To 31 Dec 2017					
	(b) Season					Post-Monsoon					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 10											

S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		
(1.)	NOx		Micro Gram per Meter Cube	17.09	11.94	17	80		
(2.)	SO2		Micro Gram per Meter Cube	12.92	8.57	12	80		
(3.)	Ammonia		Micro Gram per Meter Cube	0	0	0	400		
(4.)	PM2.5		Micro Gram per Meter Cube	47.28	40.35	47	60		
(5.)	PM10		Micro Gram per Meter Cube	78.83	69.35	78	100		
14.2. No. of Ground Water monitoring locations : 10									
S. No .	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TSS			mg/l		52	2	50	100
(2.)	Heavy Metals		Zinc	mg/l		0.15	0	5	15
(3.)	pH			NA		9.07	8.1	6.5	8.5
(4.)	Fluoride			mg/l		0	0	1	1.5
(5.)	TDS			mg/l		1920	422	500	2100
(6.)	Total Hardness			mg/l		476	58.06	300	600
(7.)	Chlorides			mg/l		617.64	110	250	1000
14.3. No. of Surface Water monitoring locations : 4									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		NA		8.51	7.89	A		
(2.)	DO		mg/l		6.33	0.41	A		

(3.)	BOD		mg/l		13.89	11.24	A		
(4.)	COD		mg/l		13.89	11.24	A		
14.4. No. of Ambient Noise monitoring locations : 10									
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard				
(1.)	Leq(Day)	A-weighted decibels(dB(A))	55	47	55				
(2.)	Leq(Night)	A-weighted decibels(dB(A))	45	38	45				
14.5. No. of Soil Sample Monitored locations : 10									
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value				
(1.)	pH			9.25	7.69				
(2.)	N(Nitrogen)	Milligram per Kilogram		26.8	0.2				
(3.)	P(Phosphorus)	Milligram per Kilogram		4.45	1.26				
(4.)	K(Potassium)	Milligram per Kilogram		27.5	9.01				
(5.)	Electric Conductivity	Millisiemens per Centimetre		53.5	32.1				
<u>Details of Ground Water Table:</u>									
(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 100 To 50									
14.6.	(b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 80 To 90								
(c)Whether Ground Water Intersection will be there ? No									
15. Details of Water Requirement (During Operation)									
S. No.	Source	Required Quantity	Distance from Source	Mode of Transport	Other Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Ground Water	12.6	0	Pipeline		Tube Well	21-4/5342/GJ/IN	30 Aug	12.6

							D/2019	g 201 9	
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15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (Kilolitre per Day)	Treatment Capacity (Kilolitre per Day)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (Kilolitre per Day)	Quantity of Discharged Water (Kilolitre per Day)
(1.)	Domestic	1.6	2	Soak Pit	Others	Soak Pit	0	1.6
(2.)	Industrial	2.5	5	ETP, Spray Dryer	Others	Evaporated	0	2.5

(a)Total Waste Water Generation 4.1

16.1. (b)Total Discharged Water 4.1

(c)Total Reused Water 0

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Spray Dryer Salt	Industrial Waste	216	Tons	50	Road	Treatment, Storage and Disposal Facility(TSDF)	
(2.)	Sodium sulphate solution	Industrial Waste	360	Kilolitre	10	Road	Others	rule 9
(3.)	ETP Sludge	Hazardous Waste (as per	180	Tons	50	Road	Treatment, Storage and	

		Hazardous and Other Waste Management rules 2016)					Disposal Facility(TS DF)	
(4.)	used oil	Industrial Waste	1.2	Kilolitre	10	Road	Others	registered re-processor
(5.)	Discarded Drums	Industrial Waste	120	Tons	10	Road	Authorized Recyclers	
(6.)	Dilute Sulfuric Acid	Industrial Waste	1120	Kilolitre	10	Road	Others	rule 9

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5	Microgram per Meter Cube	41.6	1.27	0.1	41.8	60
(2.)	PM10	Microgram per Meter Cube	72.8	1.27	0.1	72.9	100
(3.)	SO2	Microgram per Meter Cube	8.57	1.27	0.09	8.67	80
(4.)	NOx	Microgram per Meter Cube	12.45	1.27	0.03	12.5	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	DG Set	Diesel	11	0.1	PM10		100

(2.)	Boiler	Coal	12	0.3	PM10		100
<u>Power Requirement:</u>							
	(a)Quantity (Kilo Volt Amps (kVA))	150					
	(b)Source	MGVCL					
19.	(c)Uploaded Copy of Agreement	Copy of Agreement					
	(d)Standby Arrangement (Details of DG Sets)	50 KVA					
	(e)Stack Height (in m)	11					
<u>Land Ownership Pattern:</u>							
	(a)Forest Land	0					
	(b)Private Land	0.24					
20.	(c)Government Land	0					
	(d)Revenue Land	0					
	(e)Other Land	0					
	Total Land	0.24					
<u>Present Land Use Breakup of the Study Area in Ha:</u>							
	(a)Agriculture Area	0.9368					
	(b)Waste/Barren Land	0.0775					
	(c)Grazing/ Community Land	0					
	(d)Surface Water Bodies	0.0158					
	(e)Settlements	0.01					
21.	(f)Industrial	0.0075					
	(g)Forest	0					
	(h)Mangroves	0.0					
	(i)Marine Area	0.014					
	(j)Others : Scrubs, River, Open Vegetation, etc	2.0791					
	Total	3.1407					
22. Land requirement for various activities							
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks			
(1.)	Green belt		720	--			
(2.)	Main Plant		1370	--			
(3.)	Others	Open Area & Road	310	--			
Total			2400				

Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	WLS	--	0	--	
(2.)	NPA	--	0	--	
(3.)	ESAs	--	0	--	
(4.)	ESZs	--	0	--	
(5.)	Corridors	--	0	--	
(6.)	Wildlife Corridors	--	0	--	
(7.)	Critically Polluted Area	--	0	--	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations		--	0	--
(2.)	Forest		--	00	--
(3.)	Archaeological Sites		--	0	--
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p>					

Land Acquisition Status:

- (a)Acquired Land(Ha) 0.24
26. (b)Land yet to be acquired(Ha) 0
- (c)Status of Land acquisition if not acquired Land is already acquired

Rehabilitation and Resettlement (R&R):

- (a)No. of Villages 0
- (b)No. of Households 0
- (c)No. of PDFs (Project Displaced Families) 0
27. (d)No. of PAFs (Project Affected Families) 0
- (e)Funds Allocated for R&R(in Rs) 0
- (f)Status of R&R Completed

Details of Presence of Schedule-I Species:

- (a)Whether there is Presence of Schedule-I Species ? No
28. (b)Whether conservation plan for Schedule-I Species has been prepared ? No
- (c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? No
29. (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

30. (a)Whether there is Presence of Water Bodies in Buffer Area ? No

Manpower Requirement:

- (a)Permanent Employment-During Construction 5
31. (b)Permanent Employment-During Operation 5
- (c)Temporary Employment- During Construction 5

- (d) Temporary Employment- During Operation 5
- (e) No. of working days 345
- (f) Total Manpower 20

Green Belt in Ha:

- (a) Total Area of Green Belt 0.072
32. (b) Percentage of Total Project Area 30.00
- (c) No. of Plants to be Planted 150
- (d) Funds Allocated for Plantation 225000

33. Project Benefits

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	employment
(2.)	Financial	CSR & CER

34. CRZ Specific Details : Not Applicable

35. Sector Specific Details : NOT APPLICABLE

Details of Court Cases:

36. (a) Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No

Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act:

37. (a) Whether any Direction issued under EPA Act/Air Act/Water Act ? No

Details of EIA Consultant:

- (a) Have you hired Consultant for preparing document? Yes
- (i) Accreditation No. Stay order against NABET/QCI
- (ii) Name of the EIA Consultant Aqua Air Environmental Engineers Pvt. Ltd.
38. (iii) Address 403, Center Point, Nr. Kadiwala School, Ring Road, Surat-395002, Gujarat, India.
- (iv) Mobile No. 8155016995
- (v) Landline No. 0261277380
- (vi) Email Id aqua_eia@yahoo.com
- (vii) Category of Accreditation A

13.7.4.1 During deliberations, the EAC noted the following: -

- The project/activity is covered under category A of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal by sectoral Expert Appraisal Committee (EAC) in the Ministry.
- The standard ToR for the project was granted by the Ministry on 26th February, 2019. Public hearing was conducted by the State Pollution Control Board on 15th July, 2019.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site.
- The total fresh water requirement is 12.6 cum/day, proposed to be met from Tanker or Ground Water.
- Total waste water generation will be 4.1 KL/day (Industrial: 2.5 KL/day + Domestic: 1.6 KL/day). Waste water will be treated in Effluent Treatment Plant (ETP) of primary treatment facility. Treated effluent will be sent to Spray Dryer to achieve zero discharge of waste water. Domestic waste water will be disposed through septic tank & soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.

13.7.4.2 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -**A. Specific Conditions:-**

- i. Height of the stack shall not be less than 30m
- ii. No coal shall be used as fuel in the boiler
- iii. Solvent management shall be carried out as follows:
 - a. Reactor shall be connected to chilled brine condenser system.
 - b. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - c. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - d. Solvents shall be stored in a separate space specified with all safety measures.
 - e. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - g. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

B. General Conditions:-**I. Statutory compliance**

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.

- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Total fresh water requirement shall not exceed 12.6 cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- iii. The green belt of at least 4-5m width (two rows) shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- vii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- viii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- ix. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- x. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least Rs. 2% of total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake

holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- xiii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiv. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.13.7.5

Expansion of existing Bulk Drugs and Intermediates Manufacturing Unit located at Sy No: 29, Tupakulagudem (V), Tallapudi (M) West Godavari District, Andhra Pradesh by M/s Tagoor Laboratories Private Limited - Environmental Clearance

[IA/AP/IND2/115117/2018, IA-J-11011/416/2018-IA-II(I)]

13.7.5.1: The proposal is for environmental clearance for the proposed expansion of existing Bulk Drugs and Intermediates Manufacturing Unit located at Sy No: 29, Tupakulagudem (V), Tallapudi (M) West Godavari District, Andhra Pradesh by M/s Tagoor Laboratories Private Limited. The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
	(a)Name of the project(s)	Tagoor Laboratories Pvt. Ltd.
	(b)Name of the Company / Organisation	TAGOOR LABORATORIES PRIVATE LIMITED
1.	(c)Registered Address	Survey No. 29, Village - Tupakulagudem, Mandal - Tallapudi, District - West Godavari,Rangareddi,Telangana-500072
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Kasiviswanadha Raju
2.	(b)Designation (Owner/ Partner/ CEO)	Director
	(c)Address	Survey No. 29, Village - Tupakulagudem, Mandal - Tallapudi, District - West Godavari,,Balanagar,Rangareddi,Telangana-500072

(d)Pin code 500072
(e)E-mail tagoorlab@gmail.com

Category of the Project/Activity as per Schedule of EIA Notification,2006:

3. (a)Project/Activity **5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk**
(b)Category **A**
(c)Proposal Number **IA/AP/IND2/115117/2018**
(d)Master Proposal Number(Single Window) **SW/115078/2019**
(e)EAC concerned (for category A Projects only) **Industrial Projects - 2**
(f)Project Type **Fresh EC**

Location of the Project:

- (a)Plot/Survey/Khasra No. Sy No: 29
(b)Pincode 534341
4. (c)Bounded Latitudes (North) FROM 17 To 17
(d)Bounded Longitudes (East) FROM 81 To 81
(e)Survey of India Topo Sheet No. 65 G/8, 65 G/11 and 65 G/12

(a)Number of States in which
5. Project will be Executed 1
(b)Main State of the project Andhra Pradesh

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Andhra Pradesh	West Godavari	Tallapudi	Tupakulagudem

Details of Terms of Reference (ToR):

- (a)MoEF&CC / SEIAA File Number IA-J-11011/416/2018-IA-II(I)
6. (b)Date of Apply of TOR 21 Dec 2018
(c)Date of Issue of TOR / Standard ToR 04 Feb 2019

Details of Public Consultation:

7. (a)Whether the Project Exempted from Public Hearing? No
(b)Whether details of Public Hearing available? Yes

(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. N o.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 04 Jun 2019	Date : 05 Jul 2019 Distance of Public Hearing Venue from the Proposed Project : 0	Tagoor Laboratories Pvt. Ltd.	State : Andhra Pradesh District : West Godavari Tehsil : Tallapudi Village : Tupakulagudem	58	No major issues raised during Public hearing. Some people are suggested to develop green belt, maintain ZLD system properly etc during public hearing. All the villagers and NGOs are welcomed the	District Revenue Officer

						propo s		
8. <u>Details of Project Configuration/Product:</u>								
8.1. Project Configuration								
S. No.	Plant/Equipment/Facility		Configuration			Remarks		
(1.)	Coal Fired/ Fuel Briquette Boiler		6 TPH (Continuing)					
(2.)	Thermic Fluid Heater		2,00,000 KCal./Hr (Continuing)					
(3.)	Cooling Towers		5 x 200 TR & 5 x 500 TR					
(4.)	Coal Fired/ Fuel Briquette Boiler		12 TPH					
(5.)	D.G.Set		2 x 1000 KVA					
8.2. Product								
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport of Product			
(1.)	Bupropion	5.00	Others	MT/ Month	Road			
(2.)	Carisoprodol	2.00	Others	MT/ Month	Road			
(3.)	Cyclobenzaprine HCl	5.00	Others	MT/Month	Road			
(4.)	Domperidone maleate	2.00	Others	MT/ Month	Road			
(5.)	Esomeprazole Sodium	3.00	Others	MT/ Month	Road			
(6.)	Esomeprazole Magnesium trihydrate	3.00	Others	MT/ Month	Road			
(7.)	Fexofenadine Hydrochloride	15.00	Others	MT/ Month	Road			
(8.)	Itraconazole	10.00	Others	MT/ Month	Road			
(9.)	Ketrolac Tromethane	2.00	Others	MT/ Month	Road			
(10.)	Lansoprazole	10.00	Others	MT/ Month	Road			
(11.)	Loperamide Hydrochloride	10.00	Others	MT/ Month	Road			
(12.)	Nebivolol HCl	2.00	Others	MT/ Month	Road			

(13.)	Omeprazole	40.00	Others	MT/ Month	Road	
(14.)	Omeprazole Magnesium Dihydrate	2.00	Others	MT/ Month	Road	
(15.)	Pantoprazole Sodium Sesqui Hydrate	20.00	Others	MT/ Month	Road	
(16.)	Quetiapine Hemifumarate	2.00	Others	MT/ Month	Road	
(17.)	Rupatadine fumarate	2.00	Others	MT/ Month	Road	
(18.)	1-Benzyl-4- chloropiperidine	5.00	Others	MT/ Month	Road	
(19.)	1-Methylpiperidin- 4-amine	5.00	Others	MT/ Month	Road	
(20.)	Amitriptyline	10.00	Others	MT/ Month	Road	
(21.)	Atrovastatin Calcium	5.00	Others	MT/ Month	Road	
(22.)	Pimozide	2.00	Others	MT/ Month	Road	
(23.)	Cyproheptadine HCl	10.00	Others	MT/ Month	Road	
(24.)	Desloratadine	5.00	Others	MT/ Month	Road	
(25.)	Nortriptyline HCl	2.00	Others	MT/ Month	Road	
(26.)	Omeprazole Sodium	2.00	Others	MT/ Month	Road	
(27.)	Abacavir Sulfate	2.00	Others	MT/ Month	Road	
(28.)	Clopidogrelbisulfate	5.00	Others	MT/ Month	Road	
(29.)	Domperidone	30.00	Others	MT/ Month	Road	
(30.)	Ebastine	5.00	Others	MT/ Month	Road	
(31.)	Haloperidol	2.00	Others	MT/ Month	Road	
(32.)	Itopride Hydrochloride	2.00	Others	MT/ Month	Road	
(33.)	Losartan Potassium	15.00	Others	MT/ Month	Road	
(34.)	Oxatomide	1.00	Others	MT/ Month	Road	
(35.)	Rabeprazole	15.00	Others	MT/ Month	Road	

	Sodium					
(36.)	Terbinafine hydrochloride	15.00	Others	MT/ Month	Road	
(37.)	Valsartan	2.00	Others	MT/ Month	Road	
(38.)	1-Benzy-4-piperidone	5.00	Others	MT/ Month	Road	
(39.)	1-Benzylpiperidin-4-ol	5.00	Others	MT/ Month	Road	
(40.)	4-Aminopiperidine	5.00	Others	MT/ Month	Road	
(41.)	4-Hydroxy piperidine	5.00	Others	MT/ Month	Road	
(42.)	4-Phenylpiperidine	1.00	Others	MT/ Month	Road	
(43.)	4-piperidinopiperidine	1.00	Others	MT/ Month	Road	
(44.)	N-tert-Butoxycarbonyl-4-hydroxy piperidine	5.00	Others	MT/ Month	Road	
(45.)	Donepezil HCl	1.00	Others	MT/ Month	Road	
(46.)	Pregabalin	2.00	Others	MT/ Month	Road	
(47.)	Telmisartan	2.00	Others	MT/ Month	Road	

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9.

Details Not Applicable

Project Cost:

(a) Total Cost of the Project at current price level (in Crores) 42

(b) Funds Allocated for Environment Management (Capital) (in Crores) 2.55

10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.84

(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 0.61

11. **Whether project attracts the** No

<p>General Condition specified in the Schedule of EIA Notification ?</p>										
12.	<p>Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?</p>				No					
<p><u>Raw Material / Fuel Requirement:</u></p>										
	(a)Proposed quantity of raw material/fuel				8.53					
13.	(b)Existing quantity of raw material/fuel				N/A					
	(c)Total quantity of raw material/fuel				8.53					
<p>13.1. Raw Material / Fuel Profile</p>										
S. No.	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage	
(1.)	Sodium hydroxide	8.53	Others	Kg/Day	Within the country	Road		10	Open Market	
<p><u>Baseline Data :</u></p>										
14.	(a)Period of Base Line Data Collection				FROM 01 Oct 2018 To 31 Dec 2018					
	(b)Season				Post-Monsoon					
<p>14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8</p>										
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard			
(1.)	SO2		Micro Gram per Meter Cube	15.7	9.2	15.6	80			
(2.)	NOx		Micro Gram per Meter Cube	23.1	16.6	23.0	80			
(3.)	NH3		Micro Gram per Meter Cube	28.4	21.9	28.3	400			

(4.)	PM10		Micro Gram per Meter Cube	70.5	41.5	70.3	100		
(5.)	PM2.5		Micro Gram per Meter Cube	28.2	16.6	28.1	60		
14.2. No. of Ground Water monitoring locations : 8									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	TDS			mg/l		580	200	500	2000
(2.)	Chlorides			mg/l		374.8	32.48	250	1000
(3.)	pH			NA		8.19	6.42	6.5	8.5
(4.)	TSS			mg/l		0	0	0	0
(5.)	Total Hardness			mg/l		350	112.6	200	600
(6.)	Fluoride			mg/l		0.5	0.5	1	1.5
14.3. No. of Surface Water monitoring locations : 8									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		
(1.)	pH		NA		8.42	7.47	E		
(2.)	DO		mg/l		6.8	5.1	E		
(3.)	BOD		mg/l		20.2	2.0	E		
(4.)	COD		mg/l		72	4	E		
14.4. No. of Ambient Noise monitoring locations : 8									
S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard				
(1.)	Leq(Day)	A-weighted decibels(dB(A))	68.3	45.2	75				
(2.)	Leq(Night)	A-weighted decibels(dB(A))	53.7	33.4	70				

14.5. No. of Soil Sample Monitored locations : 8										
S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value					
(1.)	pH			7.56	7.05					
(2.)	N(Nitrogen)	Kilogram per hectare		1.4	1.1					
(3.)	P(Phosphorus)	Kilogram per hectare		10.6	4.6					
(4.)	K(Potassium)	Kilogram per hectare		16.8	12.3					
(5.)	Electric Conductivity	Millisiemens per Centimetre		0.25	0.1603					
<p><u>Details of Ground Water Table:</u></p> <p>(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 0.82 To 12.95</p> <p>14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 0.52 To 14.96</p> <p>(c)Whether Ground Water Intersection will be there ? No</p>										
15. Details of Water Requirement (During Operation)										
S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport		Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Surface		525.26	7.8	Pipeline		Pipeline	CE/ GDS / DW M/ OT1/ AEE 1/ 61D	14 Feb 2019	600
15.1. (a)Whether Desalination is proposed No										
16. Waste Water Management(During Operation)										
S. No	Type/Source	Quantity of	Treatment	Treatment	Mode of		Quantity of Treated Water	Quantity of		

.		Waste Water Generated (KLD)	Capacity (KLD)	Method	Disposal	Used in Recycling/Reuse (KLD)	Discharged Water (KLD)
(1.)	HTDS LTDS	177.36	180	ZLD System	Reuse within the Plant & Recycling	177.36	0

(a)Total Waste Water Generation 177.36
16.1. (b)Total Discharged Water 0
(c)Total Reused Water 177.36

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Ash from Boilers	Bottom Ash	6600	Tons	10	Road	Others	Will be sent to Brick Manufacturers
(2.)	MEE Salts	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	3660	Tons	10	Road	Treatment, Storage and Disposal Facility(TSDF)	
(3.)	Organic Evaporative Liquid from MEE Stripper	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	444	Tons	10	Road	Others	Will be sent to Cement Industries

(4.)	Organic waste (Process Residue)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1411.8	Tons	10	Road	Others	Will be sent to Cement Industries
(5.)	Solvent Distillation Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	642.6	Tons	10	Road	Others	Will be sent to Cement Industries
(6.)	Inorganic Waste	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	217.5	Tons	10	Road	Treatment, Storage and Disposal Facility(TSDF)	
(7.)	Spent Mixed Solvents	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1200	Kilolitre	10	Road	Authorized Recyclers	
(8.)	Used Oils	Hazardous Waste (as per Hazardous and Other Waste Management	0.5	Kilolitre	10	Road	Authorized Recyclers	

		ent rules 2016)						
(9.)	Spent Carbon	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	100.8	Tons	10	Road	Others	Will be sent to Cement Industries
(10.)	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	150	Tons	10	Road	Treatment, Storage and Disposal Facility(TSDF)	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5	Microgram per Meter Cube	28.1	0.75	0.128	28.23	60
(2.)	PM10	Microgram per Meter Cube	70.3	0.75	0.185	70.5	100
(3.)	SO2	Microgram per Meter Cube	15.6	0.85	2.12	17.75	80
(4.)	NOx	Microgram per Meter Cube	23.0	0.85	3.60	26.65	80

18.2. Stack Details							
S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants		Emission (G)
(1.)	Coal Fired/ Fuel Briquette Boiler	Coal	36	0.6	SO2		3.47
(2.)	Coal Fired/ Fuel Briquette Boiler	Coal	36	0.6	NOx		7.302
(3.)	Coal Fired/ Fuel Briquette Boiler	Coal	36	0.6	PM10		0.778
<p><u>Power Requirement:</u></p> <p>(a)Quantity (Kilo Volt Amps (kVA)) 2200</p> <p>(b)Source APSPDCL</p> <p>19. (c)Uploaded Copy of Agreement Not Applicable</p> <p>(d)Standby Arrangement (Details of DG Sets) 2 x 1000 KVA</p> <p>(e)Stack Height (in m) 10</p> <p><u>Land Ownership Pattern:</u></p> <p>(a)Forest Land 0</p> <p>(b)Private Land 0</p> <p>20. (c)Government Land 0</p> <p>(d)Revenue Land 0</p> <p>(e)Other Land 4.775</p> <p>Total Land 4.775</p> <p><u>Present Land Use Breakup of the Study Area in Ha:</u></p> <p>(a)Agriculture Area 20158.8</p> <p>(b)Waste/Barren Land 4237.2</p> <p>(c)Grazing/ Community Land 0</p> <p>(d)Surface Water Bodies 3884.1</p> <p>21. (e)Settlements 1829.7</p> <p>(f)Industrial 609.9</p> <p>(g)Forest 1380.3</p> <p>(h)Mangroves 0</p> <p>(i)Marine Area 0</p> <p>(j)Others : NA 0</p> <p>Total 32100</p>							
22. Land requirement for various activities							
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks			
(1.)	Main Plant		4.775				

Total	4.775				
<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>					
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	NPA	NA	0	NA	
(2.)	Wildlife Corridors	NA	0	NA	
(3.)	Critically Polluted Area	NA	0	NA	
(4.)	WLS	NA	0	NA	
(5.)	ESAs	NA	0	NA	
(6.)	ESZs	NA	0	NA	
(7.)	Corridors	NA	0	NA	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Archaeological Sites		NA	0	NA
(2.)	Forest		NA	0	NA
(3.)	Defence Installations		NA	0	NA
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p>25. <u>Tree Cutting:</u></p>					

- (a)No. of Trees Cut for the Project
(if Forest Land not Involved) 0
- (b)Details of Tree Cutting and
Planting of Trees Not Applicable

Land Acquisition Status:

- (a)Acquired Land(Ha) 4.775
26. (b)Land yet to be acquired(Ha) 0
- (c)Status of Land acquisition if not
acquired NA

Rehabilitation and Resettlement (R&R):

- (a)No. of Villages 0
- (b)No. of Households 0
- (c)No. of PDFs (Project Displaced
Families) 0
27. (d)No. of PAFs (Project Affected
Families) 0
- (e)Funds Allocated for R&R(in Rs) 0
- (f)Status of R&R Yet To Start

Details of Presence of Schedule-I Species:

- (a)Whether there is Presence of
Schedule-I Species ? No
28. (b)Whether conservation plan for
Schedule-I Species has been
prepared ? No
- (c)Whether conservation plan for
Schedule-I Species has been
approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of
Water Bodies in Core Area ? No
29. (b)Whether there is Diversion
Required ? No
- (c)Whether permission has been
obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of
Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer
Area Tallapudi Lift Canal
- (ii)Direction of Water Bodies in
Buffer Area South

(iii)Distance of Water Bodies in Buffer Area	1.50	
<u>Manpower Requirement:</u>		
(a)Permanent Employment-During Construction	0	
(b)Permanent Employment-During Operation	200	
31. (c)Temporary Employment- During Construction	0	
(d)Temporary Employment- During Operation	0	
(e)No. of working days	300	
(f)Total Manpower	200	
<u>Green Belt in Ha:</u>		
(a)Total Area of Green Belt	1.61	
32. (b)Percentage of Total Project Area	33.72	
(c)No. of Plants to be Planted	2415	
(d)Funds Allocated for Plantation	1000000	
33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Local people will get direct financial benefit by way of employment
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<u>Details of Court Cases:</u>		
36.	(a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ?	No
<u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u>		
37.	(a)Whether any Direction issued under EPA Act/Air Act/Water Act ?	No
38. <u>Details of EIA Consultant:</u>		

(a)Have you hired Consultant for preparing document?	Yes
(i)Accreditation No.	NABET/EIA/1821/RA 0100
(ii)Name of the EIA Consultant	Rightsource Industrial Solutions Pvt. Ltd.
(iii)Address	Plot No: 203, H.No:5-36/203, Prashanthi Nagar, IDA, Kukatpally, Hyderabad - 500072
(iv)Mobile No.	9885560011
(v)Landline No.	0402307060
(vi)Email Id	eiaemp@rightsource.co.in
(vii)Category of Accreditation	A
(viii)Sector of Accreditation	Industrial Projects - 2
(ix)Validity of Accreditation	25 Feb 2019

13.7.5.1 During deliberations, the EAC noted the following: -

- The project/activity is covered under category A of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal by sectoral Expert Appraisal Committee (EAC) in the Ministry.
- The standard ToR for the project was granted by the Ministry on 4th February, 2019. Public hearing was conducted by the State Pollution Control Board on 5th July, 2019.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site.
- The total water requirement is 525.26 cum/day including fresh water requirement of 320.02 cum/day, proposed to be met from Godavari River. The industry has obtained permission for withdrawal of 600 cum/day water from river Godavari from irrigation department vide letter dated 14th February, 2019.
- Generated effluent of **177.36 m³/day** will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent

13.7.5.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

A. Specific Conditions:-

- No coal shall be used as fuel in the boiler.*
- Height of the stack shall not be less than 30m*
- Solvent management shall be carried out as follows:*
 - Reactor shall be connected to chilled brine condenser system.*
 - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - Solvents shall be stored in a separate space specified with all safety measures.*

- e. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- g. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

General Conditions:-

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).

- iii. *Total fresh water requirement shall not exceed **320.02** cum/day, proposed to be met from Godavari River. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- iv. *Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- v. *The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.*
- vi. *The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.*

IV. Noise monitoring and prevention

- i. *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- ii. *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- iii. *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time*

V. Energy Conservation measures

- i. *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- i. *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- ii. *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- iii. *The company shall undertake waste minimization measures as below:-*
 - a. *Metering and control of quantities of active ingredients to minimize waste.*
 - b. *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - c. *Use of automated filling to minimize spillage.*
 - d. *Use of Close Feed system into batch reactors.*
 - e. *Venting equipment through vapour recovery system.*
 - f. *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Green Belt

- i. *The green belt of at least 4-5m width (two rows) shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

VIII. Safety, Public hearing and Human health issues

- i. *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- ii. *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- iii. *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- iv. *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*

- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. At least 2% of total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vii. *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
- viii. *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
- ix. *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- x. *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- xi. *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- xii. *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- xiii. *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- xiv. *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
- xv. *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- xvi. *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.13.7.6

Proposed Establishment of Synthetic organic chemicals and Intermediates by M/s Bhimani Dychem Industries located at Plot No. 02, S.No. 316, Dhanot, Tahasil - Kalol, Dist- Gandhinagar (Gujarat) - Environmental Clearance
[IA/GJ/IND2/81447/2018, IA-J-11011/349/2018-IA-II(I)]

13.7.6.1: The proposal is for environmental clearance for the Proposed Establishment of Synthetic organic chemicals and Intermediates by M/s Bhimani Dychem Industries located at Plot No. 02, S.No. 316, Dhanot, Tahasil - Kalol, Dist- Gandhinagar (Gujarat). The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Proposed Establishment of synthetic organic chemicals by M/s. Bhimani Dye Chem Industries located at Plot No. 02, S. No. 316, Dhanot, Ta - Kalol, Dist - Gandhinagar.

(b)Name of the Company / Organisation	BHIMANI DYECHEM INDUSTRIES			
(c)Registered Address	Plot no. 2, Survey No. 316, Opp. Dharti Industrial Estate, Ta: Kalol, Gandhinagar, Gandhinagar, Gujarat-380006			
(d)Legal Status of the Company	Others			
(e)Joint Venture	No			
<u>Address for the correspondence:</u>				
(a)Name of the Applicant	Bhavin Jayesh Bhimani			
(b)Designation (Owner/ Partner/ CEO)	Partner			
2. (c)Address	507, Mahakant, Opp. V.S. Hospital, Ellisbridge, Ahmedabad,, Kalol, Gandhinagar, Gujarat-380006			
(d)Pin code	380006			
<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>				
(a)Project/Activity	5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk			
(b)Category	A			
3. (c)Proposal Number	IA/GJ/IND2/81447/2018			
(d)Master Proposal Number(Single Window)	SW/110885/2019			
(e)EAC concerned (for category A Projects only)	Industrial Projects - 2			
(f)Project Type	Fresh EC			
<u>Location of the Project:</u>				
(a)Plot/Survey/Khasra No.	Plot No. 2, Survey No. 316, Opp. Dharti Industrial			
(b)Pincode	382715			
4. (c)Bounded Latitudes (North)	FROM 23.286754 To 23.287735			
(d)Bounded Longitudes (East)	FROM 72.416908 To 72.417177			
(e)Survey of India Topo Sheet No.	43			
(a)Number of States in which Project will be Executed	1			
5. (b)Main State of the project	Gujarat			
Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name

(1.)	Gujarat	Gandhinagar	Kalol	Dhanot
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Details of Terms of Reference (ToR):

(a) MoEF&CC / SEIAA File Number IA-J-11011/349/2018-IA-II(I)

6. (b) Date of Apply of TOR 22 Oct 2018

(c) Date of Issue of TOR / Standard ToR 29 Nov 2018

Details of Public Consultation:

(a) Whether the Project Exempted from Public Hearing? No

7. (b) Whether details of Public Hearing available? Yes

(c) Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 17 Feb 2019	Date : 19 Mar 2019 Distance of Public Hearing Venue from the Proposed Project : 0	Project Site of M/s. Bhimani Dye Chem Industries	State : Gujarat District : Gandhinagar Tehsil : Kalol Village : Dhanot	63	Effluent management, Employment, Greenbelt, management of Hazardous waste, CSR activity etc.	GAS - Additional District Magistrate

8. Details of Project Configuration/Product:

8.1. Project Configuration

S. No.	Plant/Equipment/Facility	Configuration	Remarks			
(1.)	Vessel (1)	M S R L (1 Nos.)	5000 Ltr			
(2.)	Vessel (2)	M S R L (1 Nos.)	10000 Ltr			
(3.)	Vessel (4)	M S R L (1 Nos.)	30000 Ltr			
(4.)	Vessel (3)	M S R L (1 Nos.)	20000 Ltr			
(5.)	Pulverizer	C.I (1 Nos.)	70 kgs/Hour			
(6.)	Tray Dryer	M.S. (3 Nos.)	200 Tray			
(7.)	Steam Boiler	MS (1 Nos.)	1 TPH			
(8.)	Spin Flash Dryer	S.S. (1 Nos.)	200 Ltr. / Hour			
(9.)	Air Compressor	MS (1 Nos.)	10 H.P.			
(10.)	Vessel (6)	M S R L (1 Nos.)	60000 Ltr			
(11.)	Spray Dryer	MS (1 Nos.)	700 lit/Hr.			
(12.)	Hot Air Generator	S.S. (1 Nos.)	10 Lacs KCal			
(13.)	Vessel (6)	M S R L (1 Nos.)	60000 Ltr			
(14.)	Ball mill “ 3	MS (2 Nos.)	5000 Kgs			
(15.)	R.O. Plant	S.S. (1 Nos.)	120 Ltr / Hour			
(16.)	Filter Press	S.S. (1 Nos.)	200 Ltr / Hour			
(17.)	Small Boiler	MS (1 Nos.)	0.6 TPH			
(18.)	Ball mill “ 1	MS (1 Nos.)	2000 Kgs			
(19.)	Ball mill “ 2	MS (1 Nos.)	500 Kgs			
(20.)	Hot Air Generator	SS (1 Nos.)	2.0 Lacs Kcal			
(21.)	Vessel (5)	M S R L (1 Nos.)	50000 Ltr			
8.2. Product						
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other	Mode of Transport of Product	
(1.)	PAABSA	75	Others	MT/Month	Road	

(2.)	SPCP	75	Others	MT/Month	Road	
(3.)	N.W. Acid	75	Others	MT/Month	Road	
(4.)	Sodium Naphthionate	75	Others	MT/Month	Road	
(5.)	K-Acid	75	Others	MT/Month	Road	
(6.)	Reactive Black 8/HN	120	Others	MT/Month	Road	
(7.)	Reactive Black WNN / Black Mix	120	Others	MT/Month	Road	
(8.)	Reactive Black 5/B	120	Others	MT/Month	Road	
(9.)	Reactive Blue 222/BF	120	Others	MT/Month	Road	
(10.)	Reactive Orange 12/Golden Yellow HR	120	Others	MT/Month	Road	
(11.)	Reactive Orange 13/H2R	120	Others	MT/Month	Road	
(12.)	Reactive Yellow 42/FG	120	Others	MT/Month	Road	
(13.)	Reactive Turquoise Blue 21/G	120	Others	MT/Month	Road	
(14.)	Reactive Orange 122/ ME2RL	120	Others	MT/Month	Road	
(15.)	Direct Orange 39	120	Others	MT/Month	Road	
(16.)	Direct Yellow 86	120	Others	MT/Month	Road	
(17.)	Direct Yellow 11/ Paper Yellow R	120	Others	MT/Month	Road	
(18.)	Direct Violet 9/ BRILL Violet B	120	Others	MT/Month	Road	
(19.)	Direct Blue 86/ Turquoise Blue GL	120	Others	MT/Month	Road	
(20.)	Direct blue 1/ FF	120	Others	MT/Month	Road	
(21.)	Acid Brown75/CR	120	Others	MT/Month	Road	
(22.)	Acid green 68	120	Others	MT/Month	Road	
(23.)	Acid Yellow 36	120	Others	MT/Month	Road	
(24.)	Acid Violet 90/ Bordeaux MB	120	Others	MT/Month	Road	
(25.)	Tartrazine	120	Others	MT/Month	Road	
(26.)	Sunset Yellow	120	Others	MT/Month	Road	

(27.)	Chocolate Brown	120	Others	MT/Month	Road	
(28.)	Ponceau 4R	120	Others	MT/Month	Road	
(29.)	Disperse Orange 25	30	Others	MT/Month	Road	
(30.)	Disperse Yellow 211	30	Others	MT/Month	Road	
(31.)	MUA	75	Others	MT/Month	Road	
(32.)	Reactive Blue 194/ Navy Blue ME2GL	120	Others	MT/Month	Road	
(33.)	Reactive Yellow 15/GR	120	Others	MT/Month	Road	
(34.)	Reactive Yellow 18/H4G	120	Others	MT/Month	Road	
(35.)	Reactive Yellow 145/Golden Yellow MERL	120	Others	MT/Month	Road	
(36.)	Reactive Red 198/ RB	120	Others	MT/Month	Road	
(37.)	Acid Blue 193/ Blue MTR	120	Others	MT/Month	Road	
(38.)	Acid black 194/MSRL	120	Others	MT/Month	Road	
(39.)	Acid Red 131	120	Others	MT/Month	Road	
(40.)	Acid Black 210/NT	120	Others	MT/Month	Road	
(41.)	Solvent Red 24	120	Others	MT/Month	Road	
(42.)	Solvent Yellow 33	120	Others	MT/Month	Road	
(43.)	Solvent Green 3	120	Others	MT/Month	Road	
(44.)	Disperse Blue 366	30	Others	MT/Month	Road	
(45.)	Disperse Blue 79	30	Others	MT/Month	Road	
(46.)	Reactive Yellow 160/ME4GL	120	Others	MT/Month	Road	
(47.)	Reactive Red 195/ ME4BL	120	Others	MT/Month	Road	
(48.)	Direct Black 22/ VSF	120	Others	MT/Month	Road	
(49.)	Direct Red 31/ 12B	120	Others	MT/Month	Road	
(50.)	Acid Blue 113	120	Others	MT/Month	Road	
(51.)	Solvent Blue 36	120	Others	MT/Month	Road	

9. **In case of Expansion / Modernisation / One Time Capacity Expansion (only for**

Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

Details Not Applicable

Project Cost:

- (a) Total Cost of the Project at current price level (in Crores) 4.5
- (b) Funds Allocated for Environment Management (Capital) (in Crores) 0.995
10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 0.018
- (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 3.7

11. **Whether project attracts the General Condition specified in the Schedule of EIA Notification?** No

12. **Whether project attract the Specific Condition specified in the Schedule of EIA Notification?** No

Raw Material / Fuel Requirement:

- (a) Proposed quantity of raw material/fuel 97
13. (b) Existing quantity of raw material/fuel N/A
- (c) Total quantity of raw material/fuel 97

13.1. Raw Material / Fuel Profile

S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	All Raw Material	43260	Tons per Annum	Local Market/ Various Traders	Road	100	Open Market		
(2.)	1,2,4,	480	Tons	Local	Road	100	Open		

	Diazo		per Annum	Market/ Various Traders			Market	
<u>Baseline Data :</u>								
14.	(a)Period of Base Line Data Collection			FROM 07 Mar 2018 To 27 May 2018				
	(b)Season			Summer				
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8								
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard	
(1.)	PM2.5		Micro Gram per Meter Cube	65.31	30.72	64.94	60	
(2.)	SO2		Micro Gram per Meter Cube	35.07	9.42	33.01	80	
(3.)	NOx		Micro Gram per Meter Cube	56.82	17.05	53.12	80	
(4.)	PM10		Micro Gram per Meter Cube	89.53	66.77	88.89	100	
14.2. No. of Ground Water monitoring locations : 9								
S. No.	Criteria Pollutants		Heavy Metal	Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			NA	8.1	7.3	7.0	7.5
(2.)	TSS			mg/l	1	1	1	1.5
(3.)	Total Hardness			mg/l	267	201	200	600
(4.)	Fluoride			mg/l	0.7	0.5	1.0	1.5
(5.)	Heavy Metals		Iron	mg/l	0.26	0.08	1.0	1.5
(6.)	TDS			mg/l	1009	641	500	2000
(7.)	Chlorides			mg/l	388	234.3	250	1000
14.3. No. of Surface Water monitoring locations : 3								
S. No.	Criteria Pollutants		Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body	
(1.)	COD		mg/l		48.8	4	A	

(2.)	BOD		mg/l		12	2	A
(3.)	DO		mg/l		0	0	A
(4.)	pH		NA		8.2	7.9	A

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	51	44	70
(2.)	Leq(Day)	A-weighted decibels(dB(A))	58	53	75

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	N(Nitrogen)	Milligram per Kilogram		448	0.017
(2.)	pH			8.4	7.8
(3.)	K(Potassium)	Milligram per Kilogram		71	47
(4.)	P(Phosphorus)	Milligram per Kilogram		11.07	4.68
(5.)	Electric Conductivity	Others	Ohm/cm	725	181

Details of Ground Water Table:

- (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 20 To 40
- 14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 10 To 20
- (c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Copy of Permission from Compe	Mode of Transport	Method of Water Withdrawal	Other Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
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					tent Author ity						
(1.)	Others	Local Water Tanker	85	10	Not Applicable	Pipeline	Others	By Pipeline	NA	06 Jun 2018	85

15.1. (a) Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling / Reuse (KLD)	Quantity of Discharged Water (KLD)
(1.)	Domestic	5	0.0	Septik Tank	Others	Soak pit	0.0	5
(2.)	Industrial	44.5	100	Primary Treatment	Others	Common Spray Dryer	0.0	44.5

(a) Total Waste Water Generation 49.5
16.1. (b) Total Discharged Water 49.5
(c) Total Reused Water 0

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Process Waste	Hazardous Waste (as per Hazardous and	48	Tons	50	Road	Treatment, Storage and Disposal Facility(TSDF)	

		Other Waste Management rules 2016)						
(2.)	Dilute HCl (25%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	307	Tons	100	Road	Others	sell to Actual users having rule 9 permission
(3.)	Sodium Bisulfite (28%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2010	Tons	50	Road	Others	Reuse or Sell to actual users
(4.)	Ammonium Hydroxide (25%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1602	Tons	50	Road	Others	Reuse or Sell to actual users
(5.)	ETP Sludge	Hazardous Waste (as per Hazardous and	300	Tons	80	Road	Treatment, Storage and Disposal Facility(T SDF)	

		Other Waste Management rules 2016)						
(6.)	Used Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	0.020	Kilolitre	20	Road	Others	Reuse or sell to refiners
(7.)	Glauber Salt	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	300	Tons	50	Road	Others	sell to actual users
(8.)	Distillation Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	5	Tons	50	Road	Others	Send to common incineration site
(9.)	Discarded containers/Bags /Drums	Hazardous Waste (as per Hazardous and	80	Tons	50	Road	Others	Used for packing of ETP waste or

		Other Waste Management rules 2016)						return back
(10.)	Spent Acid (40-45%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	9966	Kilolitre	100	Road	Others	sell to Actual recycler having rule 9 permission

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10	Microgram per Meter Cube	87.38	2.5	3.48	90.87	100
(2.)	NOx	Microgram per Meter Cube	49.51	2.5	0.39	49.91	80
(3.)	PM2.5	Microgram per Meter Cube	44.59	2.5	3.00	47.60	60
(4.)	SO2	Microgram per Meter Cube	35.07	2.5	0.62	35.7	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height (m)	Stack Diameter (m)	Pollutants	Other Pollutants	Emission (GLS)
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(1 .)	Steam Boiler - 2 (3 TPH)	Coal/Lignite/Ag rowaste	30	0.9	Others	SPM, SO2, NOx	0.1736,0.01736,0.0 1026
(2 .)	Steam Boiler -1 (3 TPH)	Coal/Lignite/Ag rowaste	30	0.9	Others	SPM, SO2, NOx	0.289,0.0289,0.017 09
(3 .)	Hot Air Gener ator (10 Lac. K. Cal/Hr .)	Coal/Lignite/Ag rowaste	30	0.9	Others	SPM, SO2, NOx	0.17361,0.01736,0. 10264
(4 .)	Reacti on Vessel	---	11	0.3	Others	NH3	0.0280
(5 .)	Spray Dryer	---	11	0.3	PM10		0.0280
(6 .)	Reacti on Vessel	---	11	0.3	SO2		0.0015
(7 .)	Reacti on Vessel	---	11	0.3	Others	HCl	0.0190
(8 .)	DG Set (125 KVA)	Diesel	11	0.3	Others	SPM, SO2, NOx	0.0000046,0.00064 4,0.00154

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 95
 (b)Source Uttar Gujarat Vij Co. Ltd.
 19. (c)Uploaded Copy of Agreement Not Applicable
 (d)Standby Arrangement (Details of DG Sets) DG Set (125 KVA)
 (e)Stack Height (in m) 11

Land Ownership Pattern:

20. (a)Forest Land 0.0
 (b)Private Land 0.3344
 (c)Government Land 0.0

	(d)Revenue Land	0.0		
	(e)Other Land	0.0		
	Total Land	0.3344		
	<u>Present Land Use Breakup of the Study Area in Ha:</u>			
	(a)Agriculture Area	21104.00		
	(b)Waste/Barren Land	0.0		
	(c)Grazing/ Community Land	0.0		
	(d)Surface Water Bodies	164.21		
	(e)Settlements	0.0		
21.	(f)Industrial	1110.48		
	(g)Forest	0.0		
	(h)Mangroves	0.0		
	(i)Marine Area	0.0		
	(j)Others : Habitation,Plantation,Open Vegetation	9035.89		
	Total	31414.579999999998		
22. Land requirement for various activities				
S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks
(1.)	Main Plant		0.3344	No
Total			0.3344	
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>			
23.1. Details of Ecological Sensitivity :				
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Critically Polluted Area	No Critically Polluted area	100	None within 10 km
(2.)	WLS	none	100	None within 10 km
(3.)	NPA	none	100	None within 10 km
(4.)	ESAs	none	100	None within 10 km
(5.)	ESZs	none	100	None within 10 km

(6.)	Corridors	none	100	None within 10 km	
(7.)	Wildlife Corridors	none	100	None within 10 km	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Forest		None	100	None within 10 km
(2.)	Defence Installations		None	100	None within 10 km
(3.)	Archaeological Sites		None	100	None within 10 km
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>(a)No. of Trees Cut for the Project (if Forest Land not Involved) 00</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p><u>Land Acquisition Status:</u></p> <p>(a)Acquired Land(Ha) 0.3344</p> <p>(b)Land yet to be acquired(Ha) 0</p> <p>(c)Status of Land acquisition if not acquired NA</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>(a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced 0</p>					

Families)
 (d)No. of PAFs (Project Affected Families) 0
 (e)Funds Allocated for R&R(in Rs) 0
 (f)Status of R&R In-Progress

Details of Presence of Schedule-I Species:

- (a)Whether there is Presence of Schedule-I Species ? No
 28. (b)Whether conservation plan for Schedule-I Species has been prepared ? No
 (c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? No
 29. (b)Whether there is Diversion Required ? No
 (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

30. (a)Whether there is Presence of Water Bodies in Buffer Area ? No

Manpower Requirement:

- (a)Permanent Employment-During Construction 0
 (b)Permanent Employment-During Operation 28
 31. (c)Temporary Employment- During Construction 0
 (d)Temporary Employment- During Operation 12
 (e)No. of working days 326
 (f)Total Manpower 40

Green Belt in Ha:

- (a)Total Area of Green Belt 0.1105
 32. (b)Percentage of Total Project Area 33.04
 (c)No. of Plants to be Planted 60
 (d)Funds Allocated for Plantation 150000

33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment Increases
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<p><u>Details of Court Cases:</u></p> <p>36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>38. (a)Have you hired Consultant for preparing document? Yes</p> <p>(i)Accreditation No. 15</p> <p>(ii)Name of the EIA Consultant BHAGWATI ENVIRO CARE PVT. LTD</p> <p>(iii)Address Plot No.: 28,29,30, Parmeshwar Estate-II, Opp. AMCO Bank, Phase-1, GIDC Estate, Vatva, Ahmedbad, -382445, Gujarat, India</p> <p>(iv)Mobile No. 9824051541</p> <p>(v)Landline No. 0794008305</p> <p>(vi)Email Id tech5@bhagwatienviro.in</p> <p>(vii)Category of Accreditation A</p> <p>(viii)Sector of Accreditation Industrial Projects - 2</p> <p>(ix)Validity of Accreditation 09 Sep 2019</p>		

13.7.6.1 During deliberations, the EAC noted the following: -

- The project/activity is covered under category A of item 5(f) 'Synthetic organic chemical industry' of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal by sectoral Expert Appraisal Committee (EAC) in the Ministry.
- The standard ToR for the project was granted by the Ministry on 29th November, 2018. Public hearing was conducted by the State Pollution Control Board on 19th March 2019.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site.

- The total fresh water requirement is 85 cum/day, proposed to be met from Tanker Water supply.
- Effluent of 44.5 cum/day quantity will be treated through Effluent treatment plant with primary treatment and then it will be sent to Common Spray Drying facility (Chhatral Environment Management System Pvt. Ltd.) The Committee suggested to install spray dryer within the premises to achieve Zero Liquid Discharge. The project proponent was agreed with it. Domestic effluent of 5 cum/day will sent to soak pit via septic tank.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.

13.7.6.2 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

A. Specific Conditions:-

- No coal shall be used as fuel in the boiler.*
- Height of the stack shall not be less than 30m*
- Solvent management shall be carried out as follows:*
 - Reactor shall be connected to chilled brine condenser system.*
 - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - Solvents shall be stored in a separate space specified with all safety measures.*
 - Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- All the commitments made to the public during public consultation/hearing shall be satisfactorily implemented*

B. General Conditions:-

I. Statutory compliance

- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
- The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
- The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989*

II. Air quality monitoring and preservation

- The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.*
- The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.*

- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Total fresh water requirement shall not exceed 85 cum/day, proposed to be met from Tanker water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/Authorized agency.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.

- c. *Use of automated filling to minimize spillage.*
- d. *Use of Close Feed system into batch reactors.*
- e. *Venting equipment through vapour recovery system.*
- f. *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Green Belt

- i. *The green belt of at least 4-5m width (two rows) shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.*

VIII. Safety, Public hearing and Human health issues

- i. *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- ii. *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- iii. *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- iv. *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- v. *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- vi. *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places*

IX. Corporate Environment Responsibility

- i. *At least 2% of total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- ii. *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*
- iii. *A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.*
- iv. *Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.*
- v. *Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

X. Miscellaneous

- i. *The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by*

- prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.*
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.*
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.*
 - iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.*
 - v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.*
 - vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*
 - vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
 - viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
 - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
 - x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
 - xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
 - xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
 - xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
 - xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*
 - xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
 - xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010*

Agenda No.13.7.7

Drilling of 15 exploratory wells under non forest area in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s Oil And Natural Gas Corporation Limited - Environmental Clearance

[IA/MP/IND2/110504/2017, IA-J-11011/513/2017-IA-II(I)]

13.7.7.1: The proposal is for environmental clearance for the Proposed Drilling of 15 exploratory wells under non forest area in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh by M/s Oil And Natural Gas Corporation Limited. The project activity covered under item 1(d) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	Whether it is a violation case and application is being submitted under Notification No. S.O.804(E) dated 14.03.2017 ?	No
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	Drilling of 15 exploratory wells under non forest area in Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damoh District, Madhya Pradesh
	(b)Name of the Company / Organisation	OIL AND NATURAL GAS CORPORATION LIMITED
	(c)Registered Address	Deendayal Urja Bhavan, 5, Nelson Mandela Marg, Vasant Kunj, South West, Delhi-110070
	(d)Legal Status of the Company	Central PSU
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
	(a)Name of the Applicant	Dr A K SINGH
	(b)Designation (Owner/ Partner/ CEO)	ChiefGeneralManager
2.	(c)Address	Deendayal Urja Bhavan, 5, Nelson Mandela Marg, Vasant Kunj,, Vasant Vihar, South West, Delhi-110070
	(d)Pin code	110070
	(e)E-mail	head_env@ongc.co.in
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
	(a)Project/Activity	1(b) Offshore and onshore oil and gas exploration, development & production
3.	(b)Category	A
	(c)Proposal Number	IA/MP/IND2/110504/2017
	(d)Master Proposal Number(Single Window)	SW/110491/2019

(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
(f)Project Type	Fresh EC
<u>Location of the Project:</u>	
(a)Plot/Survey/Khasra No.	Nohta-Damoh-Jabera PML Block, Vindhyan Basin, Damo
(b)Pincode	470661
4. (c)Bounded Latitudes (North)	FROM 23.4256 To 23.8726
(d)Bounded Longitudes (East)	FROM 79.4230 To 79.8525
(e)Survey of India Topo Sheet No.	F44B5, F44B6, F44B7, F44B8, F44B9, F44B10, F44B11,
(a)Number of States in which Project will be Executed	1
5. (b)Main State of the project	Madhya Pradesh

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Madhya Pradesh	Damoh	Damoh	Damoh
(2.)	Madhya Pradesh	Damoh	Jabera	Jabera

<u>Details of Terms of Reference (ToR):</u>	
(a)MoEF&CC / SEIAA File Number	IA-J-11011/513/2017-IA-II(I)
6. (b)Date of Apply of TOR	27 Oct 2017
(c)Date of Issue of TOR / Standard ToR	02 Dec 2017
<u>Details of Public Consultation:</u>	
(a)Whether the Project Exempted from Public Hearing?	No
(b)Whether details of Public Hearing available?	Yes
(c)Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above	Yes

7.1. Details of Public Hearing

S.	Details of	Details of	Venue	Location	No. of	Issues	Designa
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N o.	Advertisement	Public Hearing		Details	People Attended	Raised	tion of Presiding Officer
1	Date of Advertisement : 04 May 2019	Date : 07 Jun 2019 Distance of Public Hearing Venue from the Proposed Project : 5	Panchayat Bhavan, Kulwa	State : Madhya Pradesh District : Damoh Tehsil : Jaberah Village : Kulwa	79	Employment requirement, CSR issues, drinking water requirement, plantation drive	Additional District Collector
2	Date of Advertisement : 04 May 2019	Date : 07 Jun 2019 Distance of Public Hearing Venue from the Proposed Project : 5	Panchayat Bhavan, Kulwa	State : Madhya Pradesh District : Damoh Tehsil : Jaberah Village : Kulwa	79	CSR issues, Employment and drinking water requirement	Additional District Collector

8. **Details of Project Configuration/Product:**

8.1. **Project Configuration**

S. No.	Plant/Equipment/Facility	Configuration	Remarks
(1.)	Onland wells	15	Onland wells

8.2. Product											
S. No.	Product/Activity (Capacity/Area)	Quantity	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product					
(1.)	Onland wells	15	Others	Number	Others	NA					
<p><u>In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):</u></p> <p>9. Details Not Applicable</p> <p><u>Project Cost:</u></p> <p>(a) Total Cost of the Project at current price level (in Crores) 600</p> <p>(b) Funds Allocated for Environment Management (Capital) (in Crores) 15</p> <p>10. (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 3</p> <p>(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 1.05</p> <p>11. Whether project attracts the General Condition specified in the Schedule of EIA Notification? No</p> <p>12. Whether project attract the Specific Condition specified in the Schedule of EIA Notification? No</p> <p><u>Raw Material / Fuel Requirement:</u></p> <p>(a) Proposed quantity of raw material/fuel 4</p> <p>13. (b) Existing quantity of raw material/fuel N/A</p> <p>(c) Total quantity of raw material/fuel 4</p>											
13.1. Raw Material / Fuel Profile											
S. No.	Raw Material /	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source	Type of Linkage		

	Fuel						rt	from Project Site (in Km)	e		
(1.)	diesel	4	Kilo Litre per Day		Local	Road		5	Others		

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Oct 2018 To 31 Dec 2018
 (b) Season Post-Monsoon

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	63	28	62.1	100
(2.)	PM2.5	Micro Gram per Meter Cube	32	14	31.5	60
(3.)	SO2	Micro Gram per Meter Cube	8.1	5	8	80
(4.)	NOx	Micro Gram per Meter Cube	18.2	5.8	17.6	80

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			NA	7.19	6.47	6.5	8.5
(2.)	TSS			mg/l	1	1	1	1
(3.)	Total Hardness			mg/l	188	127	200	600
(4.)	Chlorides			mg/l	106	27	250	1000
(5.)	Fluoride			mg/l	0.85	0.1	1	1.5

(6.)	Heavy Metals		Iron	mg/l	0.31	0.05	0.3	0.3
(7.)	TDS			mg/l	399	204	500	2000
14.3. No. of Surface Water monitoring locations : 6								
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body	
(1.)	pH		NA		8.12	7.48	C	
(2.)	DO		mg/l		7.5	6.2	C	
(3.)	BOD		mg/l		2.3	2	C	
(4.)	COD		mg/l		20	10	C	
14.4. No. of Ambient Noise monitoring locations : 27								
S. No.	Parameter	Unit	Maximum Value		Minimum Value		Prescribed Standard	
(1.)	Leq(Day)	A-weighted decibels(dB(A))	47.1		41.7		55	
(2.)	Leq(Night)	A-weighted decibels(dB(A))	38.6		33.5		45	
14.5. No. of Soil Sample Monitored locations : 6								
S. No.	Parameter	Unit	Other Unit		Maximum Value		Minimum Value	
(1.)	N(Nitrogen)	Kilogram per hectare			418		248	
(2.)	Electric Conductivity	Millisiemens per Centimetre			0.148		0.053	
(3.)	P(Phosphorus)	Kilogram per hectare			63.7		18.2	
(4.)	K(Potassium)	Kilogram per hectare			305		197	
(5.)	pH				6.11		5.54	
<u>Details of Ground Water Table:</u>								
14.6.	(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl))		From 2.62 To 25					
	(b)Range of Water Table Post-Monsoon Season (Meters Below		From 0.2 To 10					

Ground Level (m bgl)) (c)Whether Ground Water Intersection will be there? No										
15. Details of Water Requirement (During Operation)										
S. N o.	Source	Source Other	Required Quantity	Distance from Source		Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
(1.)	Others	TANKERS	20	5		TANKERS	TANKERS	NA	02 Dec 2017	20
15.1. (a)Whether Desalination is proposed No										
16. Waste Water Management(During Operation)										
S. N o.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling/Reuse (KLD)	Quantity of Discharged Water (KLD)		
(1.)	Drilling and rig wash wastewater	6	6	Mobile ETP	Others	NA	6	0		
(2.)	Domestic	2	2	Septic Tank	Others	Soak Pit	2	0		
(a)Total Waste Water Generation 8 16.1. (b)Total Discharged Water 0 (c)Total Reused Water 8										
17. Solid Waste Generation/Management										
S. N o.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site(K M)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	DRILL CUTTING	Others	Drill Cutting	200	Kilolitre	0	Others	NA	Others	HDPE LINED

	GS		gs						PIT
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18.

18.1. Air Quality Impact Prediction							
S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5	Microgram per Meter Cube	32	1.13	0.0016	32.1	60
(2.)	NOx	Microgram per Meter Cube	18.2	1.3	0.0046	18.3	80
(3.)	PM10	Microgram per Meter Cube	63	1.13	0.0032	63.1	100
(4.)	SO2	Microgram per Meter Cube	8.1	1.27	0.0016	8.2	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	DG	HSD	8	0.5	NOx		0.162 g/s
(2.)	DG	HSD	8	0.5	SO2		0.059 g/s
(3.)	DG	HSD	8	0.5	PM10		0.11 g/s

Power Requirement:

(a)Quantity (Kilo Volt Amps (kVA)) 2500

(b)Source DG Set

19. (c)Uploaded Copy of Agreement Not Applicable

(d)Standby Arrangement (Details of DG Sets) 2500

(e)Stack Height (in m) 8

Land Ownership Pattern:

20. (a)Forest Land 0

(b)Private Land 0

(6.)	ESZs	NA	0	NA	
(7.)	Corridors	NA	0	NA	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Archaeological Sites		NA	0	NA
(2.)	Forest		NA	0	NA
(3.)	Defence Installations		NA	0	NA
<p>(a)Whether Noc / Permission from the competent authority is required? No</p> <p>(b)Whether NBWL recommendation is required? No</p> <p><u>Forest Land:</u></p> <p>24. Whether any Forest Land involved? No</p> <p><u>Tree Cutting:</u></p> <p>(a)No. of Trees Cut for the Project (if Forest Land not Involved) 0</p> <p>(b)Details of Tree Cutting and Planting of Trees Not Applicable</p> <p><u>Land Acquisition Status:</u></p> <p>(a)Acquired Land(Ha) 1.48</p> <p>26. (b)Land yet to be acquired(Ha) 20.77</p> <p>(c)Status of Land acquisition if not acquired Under process</p> <p><u>Rehabilitation and Resettlement (R&R):</u></p> <p>(a)No. of Villages 0</p> <p>(b)No. of Households 0</p> <p>(c)No. of PDFs (Project Displaced Families) 0</p> <p>27. (d)No. of PAFs (Project Affected Families) 0</p> <p>(e)Funds Allocated for R&R(in Rs) 0</p> <p>(f)Status of R&R Yet To Start</p>					

Details of Presence of Schedule-I Species:

- (a)Whether there is Presence of Schedule-I Species? No
28. (b)Whether conservation plan for Schedule-I Species has been prepared ? No
- (c)Whether conservation plan for Schedule-I Species has been approved by competent authority? No

Details of Presence of Water Bodies in Core Area:

- (a)Whether there is Presence of Water Bodies in Core Area ? Yes
29. (i)Details of Water Bodies in Core Area Sun Nadi, Chakra Nadi
- (b)Whether there is Diversion Required ? No
- (c)Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a)Whether there is Presence of Water Bodies in Buffer Area ? Yes
30. (i)Details of Water Bodies in Buffer Area Mala Tank
- (ii)Direction of Water Bodies in Buffer Area East
- (iii)Distance of Water Bodies in Buffer Area 1

Manpower Requirement:

- (a)Permanent Employment-During Construction 0
- (b)Permanent Employment-During Operation 0
31. (c)Temporary Employment- During Construction 0
- (d)Temporary Employment- During Operation 30
- (e)No. of working days 120
- (f)Total Manpower 30

Green Belt in Ha:

32. (a)Total Area of Green Belt 0
- (b)Percentage of Total Project Area 0.00

(c)No. of Plants to be Planted	0
(d)Funds Allocated for Plantation	0
33. <u>Project Benefits</u>	
S. No.	Type of Project Benefits
(1.)	Financial
Reduction in oil imports	
34. CRZ Specific Details : Not Applicable	
35. Sector Specific Details : NOT APPLICABLE	
<p><u>Details of Court Cases:</u></p> <p>36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>38. (a)Have you hired Consultant for preparing document? Yes</p> <p>(i)Accreditation No. NABET/EIA/1619/RA0048</p> <p>(ii)Name of the EIA Consultant ABC Techno Labs India Pvt. Ltd.</p> <p>(iii)Address 400, 13th Street, SIDCO Industrial Estate (North Phase) Ambattur – 600098</p> <p>(iv)Mobile No. 8420642002</p> <p>(v)Landline No. 0442616112</p> <p>(vi)Email Id abc@abctechnolab.com</p> <p>(vii)Category of Accreditation A</p> <p>(viii)Sector of Accreditation Industrial Projects - 2</p> <p>(ix)Validity of Accreditation 15 Nov 2019</p>	

13.7.7.2: The EAC after presentation, noted the following:

- The project/activity is covered under category A of item 1(b) 'Offshore and onshore oil and gas exploration, development & production' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).
- The standard ToR for the project was granted by the Ministry on 2nd December, 2017. Public hearing was conducted by the State Pollution Control Board on 7th June, 2019.
- There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant

Reserves and Wildlife Corridors etc within 10 km distance from the project site. There are total 12 Reserved Forests (RF) such as Khamkhera RF, Kuluva RF, Athai RF, Rajnagar RF, Mariya RF, Pateriya RF, Gidra RF, Bansipur RF, Aloni RF, Devatara RF, Kusmi RF, Gharaghar RF located within the allotted NDJ block area (1135 sq km).

- Total water requirement is 20 cum/day which will be met from private tankers. Effluent of 5 cum/day quantity will be treated through **mobile** ETP system coupled with RO. The plant will be based on Zero Liquid discharge system (if applicable). Drilling is a temporary activity lasting for 40-60 days.
- The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during public hearing have been addressed by the project proponent.

13.7.7.2 The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -

A. Specific conditions:-

- i. No drilling shall be carried out in Protected Areas/forest area.
- ii. Approach road shall be made pucca to minimize generation of suspended dust.
- iii. Total fresh water requirement shall not exceed 20 cum/day/well proposed to be met through tankers/ground water. Mobile ETP shall be installed coupled with RO to reuse the treated water in drilling system. Size of the waste shall not exceed from the hole volume of the well + volume of drill cutting expected to be generated and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- iv. No lead acid batteries shall be utilized in the project/site.

B. General Conditions

I. Statutory compliance

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, if drilling is carried in Forest areas.
- (ii) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable

II. Air quality monitoring and preservation

- (i) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with
- (ii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iii) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No.

826(E) dated 16th November, 2009 for PM10, PM2.5, SO2, NOX, CO, CH4, HC, Non-methane HC etc.

- (iv) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored.
- (v) The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.
- (vi) Approach road shall be made pucca to minimize generation of suspended dust

III. Water quality monitoring and preservation

- (i) As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Domestic sewage shall be disposed off through septic tank/soak pit.
- (ii) The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- (iii) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- (iv) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

IV. Noise monitoring and prevention

- (i) Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (ii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- (iii) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- (i) The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- (i) Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (ii) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office

VII. Safety, Public hearing and Human health issues

- (i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- (ii) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- (iii) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

- (iv) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority
 - (v) The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations
 - (vi) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
 - (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
 - (viii) The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus
 - (ix) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - (x) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - (xi) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.
- VIII. Corporate Environment Responsibility
- (i) As proposed, Rs.9 crores shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.
 - (ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
 - (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- VIII. Miscellaneous

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (vii) Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Expansion of Agrochemicals and their Intermediates at existing manufacturing site Unit-II (Dahej) at Plot No. 42/4, Amod Road, Dahej-I GIDC Industrial Estate, Dahej – 392 130, District - Bharuch (Gujarat) by M/s Bharat Rasayan Limited (Unit-II) - Environmental Clearance

[IA/GJ/IND2/114039/2008, J-11011/961/2008-IA-II (I)]

13.7.8.1: The proposal is for environmental clearance for the Proposed expansion of Agrochemicals and their Intermediates at existing manufacturing site Unit-II (Dahej) at Plot No. 42/4, Amod Road, Dahej-I GIDC Industrial Estate, Dahej – 392 130, District - Bharuch (Gujarat) by M/s Bharat Rasayan Limited (Unit-II). The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
	<u>Details of Project:</u>	
1.	(a)Name of the project(s)	M/s. BHARAT RASAYAN LIMITED (UNIT-II)
	(b)Name of the Company / Organisation	BHARAT RASAYAN LIMITED BRL
	(c)Registered Address	1501, Vikram Tower, Rajendra Place, New Delhi,Bharuch,Gujarat-392130
	(d)Legal Status of the Company	Private
	(e)Joint Venture	No
	<u>Address for the correspondence:</u>	
2.	(a)Name of the Applicant	Ajay Kumar Gupta
	(b)Designation (Owner/ Partner/ CEO)	Director
	(c)Address	Unit - II, Plot No. 42/4, Dahej GIDC Industrial Estate, Dahej,,Vagra,Bharuch,Gujarat-392130
	(d)Pin code	392130
	(e)E-mail	brldahej@bharatgroup.co.in
	<u>Category of the Project/Activity as per Schedule of EIA Notification,2006:</u>	
3.	(a)Project/Activity	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
	(b)Category	A
	(c)Proposal Number	IA/GJ/IND2/114039/2008
	(d)Master Proposal Number(Single Window)	SW/114036/2019
	(e)EAC concerned (for category A Projects only)	Industrial Projects - 2
	(f)Project Type	Expansion
	<u>Location of the Project:</u>	
4.	(a)Plot/Survey/Khasra No.	Plot No. 42/4
	(b)Pincode	392130

(c)Bounded Latitudes (North)	FROM 21.721475 To 21.726558
(d)Bounded Longitudes (East)	FROM 72.591178 To 72.593814
(e)Survey of India Topo Sheet No.	F43M09, F43M10
(a)Number of States in which	1
5. Project will be Executed	
(b)Main State of the project	Gujarat

Details of State(s) of the project				
S. No.	State Name	District Name	Tehsil Name	Village Name
(1.)	Gujarat	Bharuch	Vagra	Dahej-I GIDC Industrial Estate

Details of Terms of Reference (ToR)/EC:

(a)MoEF&CC / SEIAA File Number	NIL
6. (b)Date of Apply of EC	NIL
(c)Date of Issue of EC	NIL
(d)Previous EC Letter	NIL

Details of Public Consultation:

7. (a)Whether the Project Exempted from Public Hearing?	Yes
(b)Reason	Project Site is located within notified industrial area

Details of Project Configuration/Product:

8.	Details Not Applicable
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In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

(a)Details of certified report on compliance of earlier environmental clearance condition

(i)Certified Compliance By	Regional
(ii)Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on	Bhopal
(iii)Letter No.	File No. 5-8/2011(ENV)/410
(iv)Status of Compliance	Compiled
(v)Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report)	Copy of Certified Compliance Report submitted

(vi)Date of site visit N/A								
(b)Details of Capacity Expansion								
S. N o.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Agrochemicals & their intermediates	12300	16900	29200	Tons per Annum(TPA)		Road,Rail	
(c)Details of Configuration								
S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks			
(1.)	Multi Purpose Plant	MPP - A, B, C	MPP - D, E, F	6 Nos. MPP	Please refer Annexure - 16 for more details			
<u>Details of Consent to Operate</u> (i)Whether Consent to operate obtained ? NA (ii)Copies of all Consent to operate obtained since inception NA (iii)Date of Issue 22 Jan 2018 (iv)Valid Upto 11 Oct 2020 (v)File No. AWH-90645 (vi)Application No. 126940 <u>Project Cost:</u> (a)Total Cost of the Project at current price level (in Crores) 200 (b) Funds Allocated for Environment Management (Capital) 16 (in Crores) (c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores) 1.5 (d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores) 27.201								

11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No									
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No									
<u>Raw Material / Fuel Requirement:</u>											
	(a)Proposed quantity of raw material/fuel	70000									
13.	(b)Existing quantity of raw material/fuel	10000									
	(c)Total quantity of raw material/fuel	80000									
13.1. Raw Material / Fuel Profile											
S. No	Raw Material / Fuel	Quantity	Unit	Other Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project Site (in Km)	Type of Linkage		
(1.)	Natural Gas	80000	Others	SM3/day	Gujarat Gas Company Ltd	Pipe Conveyor		30	Linkage		
(2.)	Furnace Oil	90	Others	MT/Day	IOCL	Road		30	Linkage		
(3.)	HSD Fuel	17	Others	KL/Day	IOCL / Local suppliers	Road		30	Open Market		
(4.)	Coal	200	Others	MT/Day	Adani Coal Supply	Road		30	Open Market		
(5.)	Raw material	7658	Others	MTM	Indigenous & Import from other country	Road, Rail, Others	Sea, Air	300	Linkage		
14.	<u>Baseline Data :</u>										

(a)Period of Base Line Data Collection				FROM 01 Jan 2019 To 31 Mar 2019					
(b)Season				Pre-Monsoon					
14.1. No. of ambient Air Quality (AAQ) monitoring locations : 10									
S. No.	Criteria Pollutants		Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard		
(1.)	PM10		Micro Gram per Meter Cube	119	51	95	NAAQS		
(2.)	PM2.5		Micro Gram per Meter Cube	49	16	45	NAAQS		
(3.)	SO2		Micro Gram per Meter Cube	33	6	31	NAAQS		
(4.)	NOx		Micro Gram per Meter Cube	35	14	33	NAAQS		
14.2. No. of Ground Water monitoring locations : 8									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Heavy Metal	Unit	Other Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH			NA		8.8	8.1	7	8.5
(2.)	TDS			mg/l		3892	498	10	10
(3.)	Total Hardness			mg/l		586	121	10	10
(4.)	Fluoride			mg/l		1.1	0.5	0.5	0.5
(5.)	TSS			mg/l		330	10	10	10
(6.)	Heavy Metals		Zinc	mg/l		0.2	0.2	0.2	0.2
(7.)	Chlorides			mg/l		773	43	1	1
14.3. No. of Surface Water monitoring locations : 13									
S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body		

(1.)	BOD		mg/l		10	10	A
(2.)	COD		mg/l		16	4	A
(3.)	DO		mg/l		7.5	5	A
(4.)	pH		NA		8.3	8.2	A

14.4. No. of Ambient Noise monitoring locations : 10

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Night)	A-weighted decibels(dB(A))	69	34	Noise Rules, 2000
(2.)	Leq(Day)	A-weighted decibels(dB(A))	73	41	Noise Rules, 2000

14.5. No. of Soil Sample Monitored locations : 10

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	P(Phosphorus)	Milligram per Kilogram		21.3	2.4
(2.)	K(Potassium)	Milligram per Kilogram		840	245
(3.)	Electric Conductivity	Others	Âµsm/ cm	4619	275
(4.)	N(Nitrogen)	Percent		0.81	0.32
(5.)	pH			9.16	8.2

Details of Ground Water Table:

- (a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 3 To 9
- 14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 2 To 8
- (c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Source Other	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
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(1.)	Surface		3077	4		Pipeline	Weir	--	18 Feb 2019	1419
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15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling / Reuse (KLD)	Quantity of Discharged Water (KLD)
(1.)	Domestic	100	120	To be treated in STP	Others	Gardening/ Mixed with Industrial effluent	0	100
(2.)	Industrial	1750	1700	To be treated in ETP/MEE /RO	Others	Discharge into deep sea via u/g GIDC pipeline	130	1620

(a)Total Waste Water Generation 1850

16.1. (b)Total Discharged Water 1720

(c)Total Reused Water 130

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site (KM)	Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1.)	Used Oil	Hazardous Waste (as per Hazardous and Other Waste	30	Tons	15	Road	Authorized Recyclers	

		Managem ent rules 2016)						
(2.)	hydrobro mic acid	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	907	Ton s	50	Road	Others	Actual end users
(3.)	Spent Acid (Dilute H2SO4)	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	2144	Ton s	50	Road	Others	Actual end users
(4.)	Ammoniu m Sulphate Soln	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	496	Ton s	50	Road	Others	Actual end users
(5.)	Date expired and off- specificati on on residues	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	60	Ton s	50	Road	Others	Incineratio n at ICHWMF Site
(6.)	Sodium Sulfite Solids	Hazardou s Waste (as per Hazardou	4360	Ton s	50	Road	Others	Actual end users

		s and Other Waste Management rules 2016)						
(7.)	Sodium Sulfite Soln	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	7548	Tons	50	Road	Others	Actual end users
(8.)	Discarded Containers, barrels, liners	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1825	Tons	15	Road	Authorized Recyclers	
(9.)	Potassium Chloride Solution	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	6575	Tons	50	Road	Others	Actual end users
(10.)	Cupric Chloride	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	24	Tons	50	Road	Others	Actual end users
(11)	Mixed	Hazardous	363	Ton	50	Road	Others	Actual end

(.)	Solvents	s Waste (as per Hazardous and Other Waste Management rules 2016)		s				users
(12.)	Process Waste/Waste residue containing pesticides	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2584	Tons	50	Road	Others	co-processing / Incineration at ICHWMF Site
(13.)	ETP & MEE Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	15000	Tons	15	Road	Treatment, Storage and Disposal Facility(TSDF)	
(14.)	Coal Ash	Non-Hazardous Waste	5840	Tons	50	Road	Others	sell to brick manufactures and/or cement industry
(15.)	Distillation Residue	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	245	Tons	50	Road	Others	co-processing / Incineration at ICHWMF Site
(16.)	Ammonia Solution	Hazardous Waste	288	Tons	50	Road	Others	Actual end users

		(as per Hazardous and Other Waste Management rules 2016)						
(17.)	Potassium chloride Solids	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	37	Tons	50	Road	Others	Actual end users
(18.)	Aq Alum	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	13920	Tons	70	Road	Others	Actual end users
(19.)	Sodium Bromide Soln	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	2806	Tons	50	Road	Others	Actual end users
(20.)	Potassium Bromide Soln	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1264	Tons	50	Road	Others	Actual end users

(21 .)	Potassium Bromide (solid)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	225	Tons	50	Road	Others	Actual end users
(22 .)	Ammonium Chloride	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1375	Tons	50	Road	Others	Actual end users
(23 .)	Hydrochloric Acid Soln	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	8286	Tons	50	Road	Others	Actual end users
(24 .)	Phosphoric Acid	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	126	Tons	50	Road	Others	Actual end users
(25 .)	Methane Sulfinic Acid	Hazardous Waste (as per Hazardous and Other Waste Management	15	Tons	50	Road	Others	Actual end users

		ent rules 2016)						
(26 .)	Used catalyst (spent catalyst)	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	4.3	Ton s	50	Road	Others	Actual end users
(27 .)	Sodium bi sulfide Soln	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	1112	Ton s	50	Road	Others	Actual end users
(28 .)	DMA Solution- 40%	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	116	Ton s	50	Road	Others	Actual end users
(29 .)	Acetic Acid	Hazardou s Waste (as per Hazardou s and Other Waste Managem ent rules 2016)	28	Ton s	50	Road	Others	Actual end users
(30 .)	Sulfur (Solid)	Hazardou s Waste (as per Hazardou s and	27	Ton s	50	Road	Others	Actual end users

		Other Waste Management rules 2016)						
(31.)	Potassium methane sulfinate salt	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	222	Tons	50	Road	Others	Actual end users

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM2.5	Microgram per Meter Cube	45	1.05	0.20	45.201	NAAQS
(2.)	PM10	Microgram per Meter Cube	94	1.05	0.45	94.455	NAAQS
(3.)	NOx	Microgram per Meter Cube	33	1.05	1.59	34.592	NAAQS
(4.)	SO2	Microgram per Meter Cube	31	1.05	3.88	34.885	NAAQS

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	Common Stack	NG OR FO,	30	1.1	Others	PM, SO2, NOX	150 mg/Nm3,

	attached to Boiler-1&2, TFH-1&2	Coal					100 ppm, 50 ppm
(2.)	DG Set-1	HSD	11	0.15	Others	PM, SO2, NOX	150 mg/Nm3, 100 ppm, 50 ppm
(3.)	Common Stack attached to Boiler-3, THF-3&4	NG OR FO, Coal	40	1.3	Others	PM, SO2, NOX	150 mg/Nm3, 100 ppm, 50 ppm
(4.)	DG Set - 2	HSD	15	0.15	Others	PM, SO2, NOX	150 mg/Nm3, 100 ppm, 50 ppm
(5.)	Process Vent - 2	NA (Process Stack)	15	0.15	Others	HCl, Cl2, VOC	20, 5 mg/Nm3
(6.)	Process Vent - 6	NA (Process Stack)	15	0.15	Others	HCl, SO2	20, 40 mg/Nm3
(7.)	Process Vent - 7	NA (Process Stack)	15	0.15	Others	PM	150 mg/Nm3
(8.)	General Stack - 1	NA (Process Stack)	15	0.15	Others	VOC	--
(9.)	General Stack - 2	NA (Process Stack)	15	0.15	Others	VOC	--
(10.)	General Stack - 3	NA (Process Stack)	15	0.15	Others	VOC	--
(11.)	General Stack - 5	NA (Process Stack)	15	0.15	Others	VOC	--
(12.)	General	NA	15	0.15	Others	HCl, Cl2	20, 5

)	Stack - 6	(Process Stack)					mg/Nm3
(13.)	General Stack - 7	NA (Process Stack)	15	0.15	Others	DMA	--
(14.)	General Stack - 8	NA (Process Stack)	15	0.15	Others	NaCN	--
(15.)	Process Vent - 10	NA (Process Stack)	15	0.15	Others	HCl, SO2	20, 40 mg/Nm3
(16.)	General Stack - 9	NA (Process Stack)	15	0.15	Others	VOC	--
(17.)	Process Vent - 3	NA (Process Stack)	15	0.15	Others	H2S	5 mg/Nm3
(18.)	Process Vent - 4	NA (Process Stack)	15	0.15	Others	HCl, SO2	20, 40 mg/Nm3
(19.)	DG Set - 3	HSD	15	0.15	Others	PM, SO2, NOX	150 mg/Nm3, 100 ppm, 50 ppm
(20.)	General Stack - 4	NA (Process Stack)	15	0.15	Others	VOC	--
(21.)	General Stack - 10	NA (Process Stack)	15	0.15	Others	HCl	20 mg/Nm3
(22.)	Process Vent - 5	NA (Process Stack)	15	0.15	Others	HCl, SO2	20, 40 mg/Nm3
(23.)	Process Vent - 8	NA (Process Stack)	15	0.15	Others	PM	150 mg/Nm3
(24.)	Process Vent - 9	NA (Process Stack)	15	0.15	Others	HCl, SO2	20, 40 mg/Nm3
(25.)	Process Vent - 11	NA (Process Vent)	15	0.15	Others	NH3	175 mg/Nm3

(26.)	Process Vent - 12	NA (Process Stack)	15	0.15	NOx		25 mg/Nm3
(27.)	General stack - 11	NA (Process Stack)	15	0.15	Others	VOC	--
(28.)	General Stack - 12	NA (Process Stack)	15	0.15	Others	PM	150 mg/Nm3
(29.)	Process Vent - 1	NA (Process Stack)	15	0.15	Others	HCl, Cl2, SO2, HBr, Br2	20, 5, 40, 5, 2 mg/Nm3

Power Requirement:

- (a) Quantity (Kilo Volt Amps (kVA)) 7000
 (b) Source Dakshin Gujarat Vij Company Ltd.
 19. (c) Uploaded Copy of Agreement Copy of Agreement submitted
 (d) Standby Arrangement (Details of DG Sets) 2 Nos. of 1500 KVA of Each, 1 No. of 750 KVA
 (e) Stack Height (in m) 15

Land Ownership Pattern:

- (a) Forest Land 0
 (b) Private Land 0
 20. (c) Government Land 0
 (d) Revenue Land 0
 (e) Other Land 10.510675
Total Land 10.51067

Present Land Use Breakup of the Study Area in Ha:

- (a) Agriculture Area 3787
 (b) Waste/Barren Land 10963
 (c) Grazing/ Community Land 0.0
 (d) Surface Water Bodies 189
 21. (e) Settlements 275
 (f) Industrial 10240
 (g) Forest 277
 (h) Mangroves 764
 (i) Marine Area 4921
 (j) Others : NA 0.0
Total 31416

22. Land requirement for various activities

S. No.	Description of Activity / Facility / Plant / Others	Others	Land Requirement	Remarks	
(1.)	Built Up Area		4.740843		
(2.)	Green belt		3.479200		
(3.)	Others	Approach road(s)/ drains & Open area	2.290632		
Total			10.510675		
23.	<u>Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :</u>				
23.1. Details of Ecological Sensitivity :					
S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks	
(1.)	Critically Polluted Area	NA	0	--	
(2.)	NPA	NA	0	--	
(3.)	ESZs	NA	0	--	
(4.)	ESAs	NA	0	--	
(5.)	Corridors	NA	0	--	
(6.)	Wildlife Corridors	NA	0	--	
(7.)	WLS	NA	0	--	
23.2. Details of Environmental Sensitivity :					
S. No.	Details of Environmental Sensitivity	Other Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Archaeological Sites		NA	0	--
(2.)	Defence Installations		NA	0	--
(3.)	Others	NA	NA	0	--

(4.)	Forest		Dahej Reserve Forest	5.74	--
23.3.	(a)Whether Noc / Permission from the competent authority is required?	No			
	(b)Whether NBWL recommendation is required?	No			
	<u>Forest Land:</u>				
24.	Whether any Forest Land involved?	No			
	<u>Tree Cutting:</u>				
25.	(a)No. of Trees Cut for the Project (if Forest Land not Involved)	Not Applicable			
	(b)Details of Tree Cutting and Planting of Trees	Not Applicable			
	<u>Land Acquisition Status:</u>				
26.	(a)Acquired Land(Ha)	10.510675			
	(b)Land yet to be acquired(Ha)	0			
	(c)Status of Land acquisition if not acquired	NA			
	<u>Rehabilitation and Resettlement (R&R):</u>				
27.	(a)No. of Villages	0			
	(b)No. of Households	0			
	(c)No. of PDFs (Project Displaced Families)	0			
	(d)No. of PAFs (Project Affected Families)	0			
	(e)Funds Allocated for R&R(in Rs)	0			
	(f)Status of R&R	Completed			
	<u>Details of Presence of Schedule-I Species:</u>				
28.	(a)Whether there is Presence of Schedule-I Species ?	Yes			
	(i)Details of Schedule-I Species	Indian Peafowl, Bengal Monitor Lizard			
	(b)Whether conservation plan for Schedule-I Species has been prepared ?	No			
	(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ?	No			

Details of Presence of Water Bodies in Core Area:

- (a) Whether there is Presence of Water Bodies in Core Area ? Yes
- (i) Details of Water Bodies in Core Area Pond
- (b) Whether there is Diversion Required ? No
- (c) Whether permission has been obtained from competent authority ? No

Details of Presence of Water Bodies in Buffer Area:

- (a) Whether there is Presence of Water Bodies in Buffer Area ? Yes
- (i) Details of Water Bodies in Buffer Area Reservoir, Pond, Estuary
- (ii) Direction of Water Bodies in Buffer Area South East
- (iii) Distance of Water Bodies in Buffer Area 5

Manpower Requirement:

- (a) Permanent Employment-During Construction 350
- (b) Permanent Employment-During Operation 500
- (c) Temporary Employment- During Construction 250
- (d) Temporary Employment- During Operation 400
- (e) No. of working days 330
- (f) Total Manpower 1500

Green Belt in Ha:

S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	3.4792	0	3.4792
(2.)	Percentage of Total Project Area	33.10	0	33.1
(3.)	No. of Plants	6400	0	6400
(4.)	Funds Allocated	30	50	80

33. <u>Project Benefits</u>		
S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Financial	Revenue generation by Exports. Emp generation
34. CRZ Specific Details : Not Applicable		
35. Sector Specific Details : NOT APPLICABLE		
<p><u>Details of Court Cases:</u></p> <p>36. (a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ? No</p> <p><u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u></p> <p>37. (a)Whether any Direction issued under EPA Act/Air Act/Water Act ? No</p> <p><u>Details of EIA Consultant:</u></p> <p>38. (a)Have you hired Consultant for preparing document? Yes</p> <p>(i)Accreditation No. NABET/EIA/1821/RA0104</p> <p>(ii)Name of the EIA Consultant M/s. SIDDHI GREEN EXCELLENCE PVT. LTD. Kamal Arcade “ The Vertical Sunclock” , Comm. Plot No. C-3/3, Nr. SBI Industrial Branch, Station Road, G.I.D.C, Ankleshwar “ 393 002, Gujarat State, India</p> <p>(iii)Address</p> <p>(iv)Mobile No. 9824345895</p> <p>(v)Landline No. 0264622480</p> <p>(vi)Email Id siddhi.ank@gmail.com</p> <p>(vii)Category of Accreditation A</p> <p>(viii)Sector of Accreditation Industrial Projects - 2</p> <p>(ix)Validity of Accreditation 27 Apr 2021</p>		

13.7.8.1 During deliberations, the EAC noted the following: -

The project/activity is covered under category A of item 5(b) ‘Pesticides industry and pesticide specific intermediates (excluding formulations)’ of the schedule to the Environment Impact Assessment (EIA) Notification and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC).

The standard ToR for the project was granted by the Ministry on 11th April, 2019. Public hearing is exempted as the project site is located inside the notified industrial area.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site.

Total water requirement is 3207 m³/day of which fresh water requirement of 3077 m³/day will be met from GIDC supply.

Industrial Effluent of 1815 m³/day will be treated through Effluent Treatment Plant (ETP) having Primary, Secondary & Tertiary Treatment, MEE and RO. 150 m³/day cooling tower blowdown will be treated through RO/Filtration and approx 130 m³/day RO permeate shall be used as makeup water for cooling tower. 20 m³/day RO reject shall be treated in MEE system. 800 m³/day industrial effluent will be treated through pre-treatment, stripper and MEE system. 760 m³/day MEE condensate and 865 m³/day industrial effluent shall be treated in ETP. Treated effluent (1620 m³/day) from ETP shall be discharged into GIDC drainage connected to GIDC pumping station for final discharge through u/g Dahej-Vilayat effluent conveyance pipeline upto deep sea. Domestic effluent of 100 m³/day will be treated through Sewage Treatment Plant (STP).

13.5.9.2 The EAC during deliberation noted that the compliance report issued by Regional office at Bhopal revealed that out of 46 conditions, 8 conditions are complied subject to condition, 1 is deemed complied and 4 are agreed to comply. The EAC also noted this is a huge expansion from 12300 TPA to 29200 TPA and the proposed expansion will be carried out on existing land.

The EAC after detailed deliberation and considering the proposed huge expansion from 12300 TPA to 29200 TPA, suggested for site visit by sub-committee of the EAC. The proposal is therefore deferred for site visit.

Agenda No.13.7.9

Proposed Expansion of Various Pigments Manufacturing (from 100 MT/month to 1400 MT/month) at S.No. 85/B, ECP Canal Road, At & P: Karakhadi, Tal. Padra, Dist. Vadodara, Gujarat by M/s Choksi Colours Private Limited (Unit-II) - reconsideration of Environmental Clearance

[IA/GJ/IND2/91091/2017, IA-J-11011/179//2017-IA-II(I)]

13.7.9.1: The proposal is for environmental clearance for the Proposed Expansion of Various Pigments Manufacturing (from 100 MT/month to 1400 MT/month) at S.No. 85/B, ECP Canal Road, At & P: Karakhadi, Tal. Padra, Dist. Vadodara, Gujarat by M/s Choksi Colours Private Limited (Unit-II). The project activity covered under item 5(f) of the schedule to the EIA Notification, 2006 under Category A projects/activity. The salient features of the projects, as reported by the project proponent are as follows:

S. No.	Item	Details
1.	Whether it is a violation case and application is being submitted under Notification No. S.O.804(E) dated 14.03.2017 ?	No

Details of Project:

- (a) Name of the project(s) Choksi Colours Private Limited (Unit-II)
- (b) Name of the Company / Organisation CHOKSI COLOURS PVT LTD UNIT II
- (c) Registered Address SURVEY NO 85/B, ECP CANAL ROAD AT&T KARKHADI, Vadodara, Gujarat-391450
- (d) Legal Status of the Company Others
- (e) Joint Venture No

Address for the correspondence:

- (a) Name of the Applicant PRADIPKUMAR M CHOKSI
- (b) Designation (Owner/ Partner/ CEO) DIRECTOR
2. (c) Address SURVEY NO 85/B, ECP CANAL ROAD, AT KARKHADI,, Padra, Vadodara, Gujarat-391450
- (d) Pin code 391450

Category of the Project/Activity as per Schedule of EIA Notification, 2006:

- (a) Project/Activity **5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk**
- (b) Category **A**
3. (c) Proposal Number **IA/GJ/IND2/91091/2017**
- (d) Master Proposal Number (Single Window) **SW/91076/2019**
- (e) EAC concerned (for category A Projects only) **Industrial Projects - 2**
- (f) Project Type **Expansion**

Location of the Project:

- (a) Plot/Survey/Khasra No. Survey No. 85/B, ECP Canal Road
- (b) Pincode 391450
4. (c) Bounded Latitudes (North) FROM 22.202817 To 22.203778
- (d) Bounded Longitudes (East) FROM 72.919247 To 72.920186
- (e) Survey of India Topo Sheet No. F43G16
- (a) Number of States in which Project will be Executed 1
5. (b) Main State of the project Gujarat

Details of State(s) of the project

S. No.	State Name	District Name	Tehsil Name	Village Name

(1.)	Gujarat	Vadodara	Padra	Karakhadi
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Details of Terms of Reference (ToR)/EC:

(a) MoEF&CC / SEIAA File Number **NIL**

6. (b) Date of Apply of EC **NIL**

(c) Date of Issue of EC **NIL**

(d) Previous EC Letter **NIL**

Details of Public Consultation:

(a) Whether the Project Exempted from Public Hearing? No

7. (b) Whether details of Public Hearing available? Yes

(c) Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above Yes

7.1. Details of Public Hearing

S. No.	Details of Advertisement	Details of Public Hearing	Venue	Location Details	No. of People Attended	Issues Raised	Designation of Presiding Officer
1	Date of Advertisement : 29 Oct 2018	Date : 02 Nov 2018 Distance of Public Hearing Venue from the Proposed Project : 0	Project Site	State : Gujarat District : Vadodara Tehsil : Padra Village : Karakhadi	119	air-water-waste issues, local employment, CSR, greenbelt	Additional District Magistrate

Details of Project Configuration/Product:

8. **Details Not Applicable**

In case of Expansion / Modernisation / One Time Capacity Expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii):

9. (a) Details of certified report on compliance of earlier environmental clearance condition : Not applicable as the earlier project established prior to EIA Notification, 2006

(b) Details of Capacity Expansion

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Mode of Transport of Product	
(1.)	Pigment Alpha Blue	0	2400	2400	Tons per Annum(TPA)	Road	
(2.)	Pigment Beta Blue	0	3000	3000	Tons per Annum(TPA)	Road	
(3.)	Activated Crude Blue	0	3000	3000	Tons per Annum(TPA)	Road	
(4.)	Pigment Green 7	0	1200	1200	Tons per Annum(TPA)	Road	
(5.)	CPC Blue	1200	6000	7200	Tons per Annum(TPA)	Road	

(c) Details of Configuration

S. No.	Plant / Equipment / Facility	Existing Configuration	Proposed Configuration	Final configuration after expansion	Remarks
(1.)	Glass vessel	10 kl x 4	20 kl x 4	8 total	
(2.)	MS reactors	10 kl x 2	20 kl x 4	6 total	
(3.)	Filter press	48" x 51 plats (2 nos)	48" x 51 plats (6 nos)	8 total	
(4.)	Pigment vessels	15 kl x 2	15 kl x 2	4 total	
(5.)	Heat exchangers	60 M2 (2 nos)	100 M2 (4 nos)	6 total	
(6.)	MS tank	20 kl x 4	20 kl x 6	10 total	
(7.)	Dumping vessel	12.5 kl x 2	10 kl x 5	7 total	
(8.)	Receivers	10 kl x 3	15 kl x 4	7 total	

9.1. **Details of Consent to Operate**

	(i)Whether Consent to operate obtained ?	NA						
	(ii)Copies of all Consent to operate obtained since inception	NA						
	(iii)Date of Issue	06 Jul 2018						
	(iv)Valid Upto	31 Dec 2022						
	(v)File No.	AWH-95463						
	(vi)Application No.	AWH-95463						
	<u>Project Cost:</u>							
	(a)Total Cost of the Project at current price level (in Crores)	28						
	(b) Funds Allocated for Environment Management (Capital) (in Crores)	4						
10.	(c) Funds Allocated Towards CER (Corporate Environment Responsibility) (in Crores)	0.7						
	(d) Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Crores)	9.25						
11.	Whether project attracts the General Condition specified in the Schedule of EIA Notification ?	No						
12.	Whether project attract the Specific Condition specified in the Schedule of EIA Notification ?	No						
	<u>Raw Material / Fuel Requirement:</u>							
	(a)Proposed quantity of raw material/fuel	15600						
13.	(b)Existing quantity of raw material/fuel	1200						
	(c)Total quantity of raw material/fuel	16800						
13.1. Raw Material / Fuel Profile								
S. No.	Raw Material / Fuel	Quantity	Unit	Source	Mode of Transport	Other Mode of Transport	Distance of Source from Project	Type of Linkage

							Site (in Km)		
(1.)	attached as pdf	16800	Tons per Annum	open market	Road		50	Open Market	

Baseline Data :

14. (a) Period of Base Line Data Collection FROM 01 Oct 2017 To 31 Dec 2017
(b) Season Post-Monsoon

14.1. No. of ambient Air Quality (AAQ) monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
(1.)	PM10	Micro Gram per Meter Cube	89.1	55.5	78.3	100
(2.)	PM2.5	Micro Gram per Meter Cube	70.3	25.1	44.3	60
(3.)	SO2	Micro Gram per Meter Cube	17.2	10.0	15.3	80
(4.)	NOx	Micro Gram per Meter Cube	19.6	12.1	17.4	80

14.2. No. of Ground Water monitoring locations : 8

S. No.	Criteria Pollutants	Unit	Maximum Value	Minimum Value	Desirable Limit	Maximum Permissible Limit
(1.)	pH	mg/l	7.7	7.25	6.5	8.5
(2.)	TDS	mg/l	3118	1298	500	2000
(3.)	TSS	mg/l	14.2	8.9	0	0
(4.)	Chlorides	mg/l	1619	618	250	1000
(5.)	Fluoride	mg/l	0.81	0.49	1	1.5
(6.)	Total Hardness	mg/l	563	282	300	600

14.3. No. of Surface Water monitoring locations : 8

S. No.	Criteria Pollutants	Other Criteria Pollutants	Unit	Other Unit	Maximum Value	Minimum Value	Classification of inland water body
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(1.)	pH		NA		7.8	7.4	A
(2.)	DO		mg/l		5.7	4.1	B
(3.)	COD		mg/l		42.5	20.1	D
(4.)	BOD		mg/l		22.8	11.9	D

14.4. No. of Ambient Noise monitoring locations : 8

S. No.	Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
(1.)	Leq(Day)	A-weighted decibels(dB(A))	60.4	51.9	75
(2.)	Leq(Night)	A-weighted decibels(dB(A))	54.1	40.1	70

14.5. No. of Soil Sample Monitored locations : 8

S. No.	Parameter	Unit	Other Unit	Maximum Value	Minimum Value
(1.)	N(Nitrogen)	Milligram per Kilogram		152	136
(2.)	P(Phosphorus)	Milligram per Kilogram		88	49
(3.)	K(Potassium)	Milligram per Kilogram		172	131
(4.)	pH	Others	pH unit	7.8	7.4
(5.)	Electric Conductivity	Others	dS/m	2.6	1.5

Details of Ground Water Table:

(a)Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)) From 60 To 80

14.6. (b)Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)) From 55 To 70

(c)Whether Ground Water Intersection will be there ? No

15. Details of Water Requirement (During Operation)

S. No.	Source	Required Quantity	Distance from Source	Mode of Transport	Method of Water Withdrawal	Letter No.	Date of Issue	Permitted Quantity
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(1.)	Ground Water	479	0	Pipeline	Tube Well	21-4/4740/GJ/IND/2019	09 Jan 2019	479
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15.1. (a)Whether Desalination is proposed No

16. Waste Water Management(During Operation)

S. No.	Type/Source	Quantity of Waste Water Generated (KLD)	Treatment Capacity (KLD)	Treatment Method	Mode of Disposal	Other Mode of Disposal	Quantity of Treated Water Used in Recycling / Reuse (KLD)	Quantity of Discharged Water (KLD)
(1.)	Domestic	25	30	STP	Green Belt Renewal Plant		25	
(2.)	Utilities - water treatment, boiler, cooling	110	110	RO	Others	CETP-EICL Umraya	88	22
(3.)	Industrial - process, lab, scrubber, washing	945	1000	ETP-RO-MEE/ATFD	Reuse within the Plant & Recycling		945	

(a)Total Waste Water Generation 1080

16.1. (b)Total Discharged Water 22

(c)Total Reused Water 1058

17. Solid Waste Generation/Management

S. No.	Name of Waste	Item	Quantity per Annum	Unit	Distance from Site (KM)	Mode of Transport	Mode of Disposal
(1.)	ETP sludge	Hazardous Waste (as per Hazardous	2760	Tons	50	Road	Treatment, Storage and Disposal Facility(TSDF)

		and Other Waste Management rules 2016)							
(2.)	MEE salt	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1680	Tons	50	Road		Treatment, Storage and Disposal Facility (TSDF)	
(3.)	Discarded containers and liners	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	289	Tons	45	Road		Authorized Recyclers	
(4.)	Aluminum chloride solution	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	9600	Tons	50	Road		sold to actual users under Rule-9	
(5.)	Sodium hypo chlorite solution	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1080	Tons	50	Road		sold to actual users under Rule-9	
(6.)	used oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	1	Kilolitre	35	Road		Authorized Recyclers	
(7.)	HCl (~20%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)	840	Tons	50	Road		sold to actual users under Rule-9	

18.

18.1. Air Quality Impact Prediction

S. No.	Criteria Pollutants	Unit	Baseline Concentration	Distance GLC	Incremental Concentration	Total GLC	Prescribed Standard
(1.)	PM10	Microgram per Meter Cube	72.0	1	6.9	79	100
(2.)	PM2.5	Microgram per Meter Cube	37.2	1	6.9	44.2	60
(3.)	SO2	Microgram per Meter Cube	13.2	1	2.7	16	80
(4.)	NOx	Microgram per Meter Cube	15.3	1	1.5	17	80

18.2. Stack Details

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)	Pollutants	Other Pollutants	Emission (GLS)
(1.)	DG Set	Diesel	9	0.225	Others	PM, SO2, NOx	0
(2.)	Boiler and TFH	Coal	30	0.45	Others	PM, SO2, NOx	0
(3.)	Hot air generator	Coal	30	0.45	Others	PM, SO2, NOx	0
(4.)	Process vessel of CPC Blue	none	10	0.3	Others	NH3	0
(5.)	Boiler and TFH	Coal	30	0.45	Others	PM, SO2, NOx	0
(6.)	Hot air generator	Coal	30	0.45	Others	PM, SO2, NOx	0
(7.)	Chlorination and	none	21	0.3	Others	HCl, Cl2	0

	dumping vessel of CPC Green						
(8.)	SFDs	none	11	0.3	PM10		0
(9.)	Process vessel of Alpha Blue	none	11	0.3	SO2		0
(10.)	Process vessel of CPC Blue	none	21	0.3	Others	NH3	0

Power Requirement:

- (a)Quantity (Kilo Volt Amps (kVA)) 750
(b)Source MGVCL
19. (c)Uploaded Copy of Agreement Not Applicable
(d)Standby Arrangement (Details of DG Sets) 300 kva
(e)Stack Height (in m) 9

Land Ownership Pattern:

- (a)Forest Land 0
(b)Private Land 1.7165
20. (c)Government Land 0
(d)Revenue Land 0
(e)Other Land 0
Total Land 1.7165

Present Land Use Breakup of the Study Area in Ha:

- (a)Agriculture Area 18447
(b)Waste/Barren Land 9937
(c)Grazing/ Community Land 0
(d)Surface Water Bodies 2199
21. (e)Settlements 623
(f)Industrial 258
(g)Forest 0
(h)Mangroves 0
(i)Marine Area 0
(j)Others : 0
Total 31464

22. Land requirement for various activities

S. No.	Description of Activity /	Others	Land Requirement	Remarks	
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	Facility / Plant / Others			
(1.)	Main Plant		0.3290	
(2.)	Green belt		0.5665	
(3.)	Built Up Area		0.3937	
(4.)	Others	Parking, roads and open area	0.4273	Parking, roads and open area

Total 1.7165

23. **Ecological and Environmental Sensitivity (Within 10 Km):- WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs-Eco Sensitive Zones :**

23.1. **Details of Ecological Sensitivity :**

S. No.	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	NPA	Blackbuck National Park Velavadar	86	None within 10 km
(2.)	ESZs	Nal Sarovar Birds Sanctuary	110	None within 10 km
(3.)	Corridors	Gir National Park	247	None within 10 km
(4.)	Wildlife Corridors	Gir National Park	247	None within 10 km
(5.)	ESAs	Mount Abu	251	None within 10 km
(6.)	WLS	Thol Wildlife Sanctuary	117	None within 10 km
(7.)	Critically Polluted Area	Vatva	96	None within 10 km

23.2. **Details of Environmental Sensitivity :**

S. No.	Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
(1.)	Defence Installations	None within 10 km	00	None within 10 km
(2.)	Forest	Shoolpaneshwar	76	None within 10

					km
(3.)	Archaeological Sites		Lothal	74	None within 10 km

23.3. (a)Whether Noc / Permission from the competent authority is required? No

(b)Whether NBWL recommendation is required? No

Forest Land:

24. **Whether any Forest Land involved?** No

Tree Cutting:

25. (a)No. of Trees Cut for the Project (if Forest Land not Involved) Not Applicable

(b)Details of Tree Cutting and Planting of Trees Not Applicable

Land Acquisition Status:

26. (a)Acquired Land(Ha) 1.7165

(b)Land yet to be acquired(Ha) 0

(c)Status of Land acquisition if not acquired NA

Rehabilitation and Resettlement (R&R):

27. (a)No. of Villages 0

(b)No. of Households 0

(c)No. of PDFs (Project Displaced Families) 0

(d)No. of PAFs (Project Affected Families) 0

(e)Funds Allocated for R&R(in Rs) 0

(f)Status of R&R Completed

Details of Presence of Schedule-I Species:

28. (a)Whether there is Presence of Schedule-I Species ? No

(b)Whether conservation plan for Schedule-I Species has been prepared ? No

(c)Whether conservation plan for Schedule-I Species has been approved by competent authority ? No

29. **Details of Presence of Water Bodies in Core Area:**

	(a)Whether there is Presence of Water Bodies in Core Area ?	Yes		
	(i)Details of Water Bodies in Core Area	ponds of Gametha and Muval		
	(b)Whether there is Diversion Required ?	No		
	(c)Whether permission has been obtained from competent authority ?	No		
	<u>Details of Presence of Water Bodies in Buffer Area:</u>			
	(a)Whether there is Presence of Water Bodies in Buffer Area ?	Yes		
30.	(i)Details of Water Bodies in Buffer Area	ponds of Abhol, Gajana, Piludra, Masar, and Vadu		
	(ii)Direction of Water Bodies in Buffer Area	East		
	(iii)Distance of Water Bodies in Buffer Area	6.5		
	<u>Manpower Requirement:</u>			
	(a)Permanent Employment-During Construction	35		
	(b)Permanent Employment-During Operation	0		
31.	(c)Temporary Employment- During Construction	0		
	(d)Temporary Employment- During Operation	65		
	(e)No. of working days	26		
	(f)Total Manpower	100		
32.	<u>Green Belt in Ha:</u>			
S. No.	Description	Existing	Proposed	Total
(1.)	Total Area of Green Belt	3200	2465	5665
(2.)	Percentage of Total Project Area	19	14	33
(3.)	Funds Allocated	2	6	8
(4.)	No. of Plants	280	350	630
33.	<u>Project Benefits</u>			

S. No.	Type of Project Benefits	Details of Project Benefits
(1.)	Social	Employment generation, CSR activities
(2.)	Financial	Contributing to nation by paying various taxes
34. CRZ Specific Details : Not Applicable 35. Sector Specific Details : NOT APPLICABLE 35. Sector Specific Details For Industrial Projects - 2		
S. No.	Item	Details
S. No.	Item	Details
<u>Details of Court Cases:</u>		
36.	(a)Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up ?	No
<u>Details of Direction Issued under Environment (Protection) Act / Air (Prevention & Control of Pollution)) Act / Water (Prevention & Control of Pollution) Act:</u>		
37.	(a)Whether any Direction issued under EPA Act/Air Act/Water Act ?	No
<u>Details of EIA Consultant:</u>		
38.	(a)Have you hired Consultant for preparing document?	Yes
	(i)Accreditation No.	NABET/EIA/1619/RA 0084
	(ii)Name of the EIA Consultant	San Envirotech Pvt. Ltd., Ahmedabad
	(iii)Address	401/402/423/424/324, Medicine Market, Opp. Shefali Centre, Paldi cross Road, Ahmedabad
	(iv)Mobile No.	9825007201
	(v)Landline No.	0792658307
	(vi)Email Id	mahendra.sepl@gmail.com
	(vii)Category of Accreditation	A
	(viii)Sector of Accreditation	Industrial Projects - 2
	(ix)Validity of Accreditation	23 Dec 2019
Additional Detail Sought Additional Detail Sought, 3.		
Additional Detail Sought		
Sno.	ADS Letter	Remarks
		Date of

			ADS
1.	NA	Deferred	17 May 2019
2.	<u>ADS Letter</u>	Reply of Additional information asked is attached.	20 Aug 2019

13.7.9.1 The proposal was earlier considered by the EAC in its meeting held on 6-8 May, 2019, wherein the EAC observed that the *project proposed in non-industrial area and incremental concentrations for critical air pollutants namely SPM & SO₂ on higher side, asked for confirmation of the same and also prediction of maximum GLC for PM₁₀. Further, in view of significant quantum of fresh water requirement, the Committee desired for some progress in this regard.*

The response from the project proponent is as under:

S. No.	Information sought by the EAC	Reply by the PP
1	The EAC, after deliberations and in view of the project proposed in non-industrial area and incremental concentrations for critical air pollutants namely SPM & SO ₂ on higher side, asked for confirmation of the same and also prediction of maximum GLC for PM ₁₀ .	We have proposed to modified APCM with high efficient Bag house and proposed to use low sulphur, low ash containing coal. In addition to above, PM from vent of Spin Flash Dryer will be our products and we have asked to supplier to provide high efficient SFD, which control pollutant and save the valued products. Resulted to drastically reduce GLC for PM ₁₀ & SO ₂ .
2	Further, in view of significant quantum of fresh water requirement, the Committee desired for some progress in this regard.	Our area falls under the safe category based on the ground water resources and we have applied for CGWA permission, application is under process. CGWA authority has arranged review meeting on 19.08.2019 and asked some additional information.

13.7.9.2 During deliberations, the EAC noted the following: -

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by the sectoral EAC in the Ministry.

Standard ToR for the project was granted on 26th July, 2017. Public hearing for the project has been conducted by the Gujarat State Pollution Control Board on 2nd November, 2018. The main issues raised during the public hearing are related to ground water contamination, air pollution, greenbelt development, CSR, employment to locals, etc.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc within 10 km from the project site. Mahi river is flowing at a distance of 4.5 km in N direction.

Total water requirement is estimated to be 1537 cum/day, which includes fresh water requirement of 479 cum/day, proposed to be met from bore well. Application in this regard has been submitted to CGWA on 9th January, 2019.

Industrial effluent of 1075 cum/day will be treated through ETP-RO-MEE/ATFD setup. RO reject (22 cum/day) from utilities was proposed to be sent to CETP-EICL, Umraya for final disposal, which will be now treated through MEE. RO permeate of 853 cum/day and MEE condensate of 180 cum/day shall be recycled/reused. Domestic wastewater of 30 cum/day will be treated in STP and treated water of 25 cum/day will be used in greenbelt development. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The expenditure towards CER for the project would be 2% of the project cost as committed by the project proponent.

Existing unit is in operation before year 2006 and hence environmental clearance is not available.

13.7.9.3 *The EAC, after deliberations, recommended the project for grant of environmental clearance, subject to compliance of terms and conditions as under: -*

- i. No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.*
- ii. No coal shall be used as fuel in the boiler. Bag filter with PTFE dipped shall be used as bag material*
- iii. Height of the stack shall not be less than 30m.*
- iv. Solvent management shall be carried out as follows:*
 - (i) Reactor shall be connected to chilled brine condenser system.*
 - (ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.*
 - (iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.*
 - (iv) Solvents shall be stored in a separate space specified with all safety measures.*
 - (v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.*
 - (vi) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.*
 - (vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.*
- Total fresh water requirement shall not exceed 479 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- I. Statutory compliance*
 - (i) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.*
 - (ii) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.*
 - (iii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.*
- II. Air quality monitoring and preservation*

- (i) The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- (ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- (iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- (iv) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (v) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (vi) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (vii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

III. Water quality monitoring and preservation

- (i) The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- (iii) The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- (iv) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (v) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vi) The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- (i) *Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- (ii) *The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.*
- (iii) *The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.*

V. Energy Conservation measures

- (i) *The energy sources for lighting purposes shall preferably be LED based.*

VI. Waste management

- (i) *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.*
- (ii) *Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.*
- (iii) *The company shall undertake waste minimization measures as below:-*
 - (a) *Metering and control of quantities of active ingredients to minimize waste.*
 - (b) *Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.*
 - (c) *Use of automated filling to minimize spillage.*
 - (d) *Use of Close Feed system into batch reactors.*
 - (e) *Venting equipment through vapour recovery system.*
 - (f) *Use of high pressure hoses for equipment clearing to reduce wastewater generation*

VII. Safety, Public hearing and Human health issues

- (i) *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.*
- (ii) *The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.*
- (iii) *The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.*
- (iv) *Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.*
- (v) *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*
- (vi) *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- (vii) *There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places*

VIII. Corporate Environment Responsibility

- (i) *As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- (ii) *The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.*
- (iii) *A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.*

- (iv) *Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.*
- (v) *Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

VIII. Miscellaneous

- (i) *The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.*
- (ii) *The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.*
- (iii) *The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.*
- (iv) *The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.*
- (v) *The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.*
- (vi) *The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.*
- (vii) *The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.*
- (viii) *The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.*
- (ix) *The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.*
- (x) *No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).*
- (xi) *Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.*
- (xii) *The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.*
- (xiii) *The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.*
- (xiv) *The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.*

- (xv) *The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.*
- (xvi) *Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.*

13.8 Any Other

Agenda No.13.8.1

Expansion of existing molasses based distillery from 60 to 90 KLPD At/Po Kundal, Tal-Palus, Dist-Sangali, Maharashtra, Sangli (Maharashtra) by M/s Kranti Agrani Dr. G. D. Babu Lad Sahakari Sakhar Karkhana Ltd - For amendment in ToR reg.

[IA/MH/IND2/117632/2019, No.J-11011/117/2016- IA II(I)]

13.8.1.1 The proposal is for amendment in the standard terms of reference granted by the Ministry vide letter dated 26th August, 2019 for expansion of molasses based distillery from 60 to 90 KLPD At/Po Kundal, Taluka Palus, District Sangali (Maharashtra) in favour of M/s Kranti Agrani Dr. G. D. Babu Lad Sahakari Sakhar Karkhana Ltd.

13.8.1.2 The project proponent has requested for amendment in the ToR with the details are as under:

S. No	Para of ToR issued by MoEF & CC	Details as per the ToR	To be revised/ read as	Justification/reason
1	---	Standard ToR Approval Letter last paragraphs : "the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation"	Standard ToR Approval Letter last paragraphs:"the Standard ToR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed without public consultation"	Public hearing of existing 60 KLPD unit was held on 19 th October, 2016 i.e. less than 3 years from now.

13.8.1.3 *The EAC, having taking note that the public hearing conducted 19th October, 2016 is for a different project and the scope of the presently submitted project being different, insisted for conducting fresh public hearing.*

List of the Expert Appraisal Committee (Industry-2) members attended the meeting

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Dr. Y.V. Rami Reddy	Member
3.	Dr TudilIndrasen Reddy	Member
4.	Dr J S Sharma	Member
5.	Shri Dinabandhu Gouda	Member
6.	Dr T K Joshi	Member
7.	Shri Ashok Agarwal	Member
8.	Dr Ajay Gairola	Member
9.	Shri SC Mann	Member
10.	Shri Sharath Kumar Pallerla	Member Secretary
