MINUTES OF THE 42nd EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) MEETING HELD DURING 29-31 OCTOBER, 2018

Venue: Indus Hall, Ground Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 3.

Time: 10:30 AM

42.1 Opening Remarks by the Chairman

42.2 Confirmation of minutes of 41st meeting of the EAC (Industry-2) held during 24-26 September 2018 at Indira Paryavaran Bhawan, New Delhi.

The EAC, having taken note that no comments were offered on minutes of its 41st meeting held on 24-26 September 2018 at New Delhi, confirmed the same, except that in respect of Agenda No.41.3.15, considering the submission from the project proponent in this regard. Accordingly, the said agenda item was taken up for deliberations/correction in minutes of the meeting.

Agenda No.41.3.15

Setting up Agrochemicals, Intermediates and Specialty chemicals by M/s United Phosphorus Limited (UPL) at Plot No.D-3/6, Dahej-III, GIDC Industrial Estate, Village Kadodara, Taluka Vagra, District Bharuch (Gujarat)

[J-11011/306/2016- IA II(I)) (IA/GJ/IND2/58497/2016]

41.3.15.1 The project proponent vide letter dated 6th October, 2018 has requested for correction in minutes of the EAC (Industry-2) meeting held on 25th September, 2018, in respect of products, by-products and effluent treatment mechanism.

41.3.15.2 The EAC, after deliberations, has recommended for correction in minutes of the meeting at para 41.3.15.2, to be read as under:-

The proposal is for environmental clearance to the project for manufacturing pesticides technical - 104000 TPA (11 nos of products), pesticide specific intermediates - 67000 TPA (7 nos of products, excluding Isocyanate products), Intermediates and Speciality chemical- 80500 TPA (16 nos of products) and the captive power plant of 55 MWPH (Phase 1-20 MWPH, Phase 2-20 MWPH & Phase 3-15 MWPH) by M/s UPL Ltd in a total area of 755495.16 sqm at Plot No.D-3/6, Dahej- III GIDC Industrial estate (within PCPIR region), Village Kadodara, Taluka Vagra, District Bharuch (Gujarat).

Total effluent generated from different industrial operations is estimated to be 5624 KLD, which shall be taken to ETP for primary, secondary and tertiary treatment, followed by RO and MEE. Treated effluent of 3618 KLD shall be recycled to meet the water requirement for different processes, and the remaining 2006 KLD shall be discharged into deep sea through GIDC drain.

The details of products/by-products are as under:-

S. No.	Name of Product	CAS No.	Production (MTPA)	Sector as per EC Notification 2006

Pesticide (Technical)- EC Required as per EIA Notification 2006					
1		**S Metolachlor** (a mixture of (S)-2-chloro-N-2(Ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) Acetamide and (R)-2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-Methoxy-1-Methylphenyl) Acetamide in the proportion 80 – 100 % to 20 – 0 %	87392-12-9	5000	5(b) Pesticide (Herbicide)
2		**Dicamba** (3,6-dichloro-2-methoxybenzoic acid),	1918-00-9	5000	5(b) Pesticide (Herbicide)
3		**Propanil** (3',4'-dichloroproionanilide)	709-98-8	10000	5(b) Pesticide (Herbicide)
4		**Clodinafop** (*R*)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanic acid	114420-56-3	2000	5(b) Pesticide (Herbicide)
5		**Asulam** (methyl[(4-aminophenyl) sylfonyl]carbamate)	3337-71-1	4000	5(b) Pesticide (Herbicide)
6		**Azoxystrobin** (methyl (E) -2-[[6-2(cynophenoxy) pyrimidinyl] oxy] –a-(Methoxy methylene) benzeneacetate)	131860-33-8	2000	5(b) Pesticide (Fungicide)
7		**Acephate** (N-[methoxy (methylthio) phosphinoyl] acetamide	30560-19-1	30000	5(b) Pesticide (Insecticide)
8		**Pilot Plant /Multi Purpose Plant (MPP) (As Azoxystrobin)** (methyl (E) -2-[[6-2(cynophenoxy) pyrimidinyl] oxy] –a- (Methoxy methylene) benzeneacetate)	131860-33-8	1000	5(b) Pesticide (Fungicide)
9		**Atrazine** (6-chloro-N-ethyl-N'-1(1-methylethyl)-1,3,5-triazine-2,4-diamine)	1912-24-9	5000	5(b) Pesticide (Herbicide)
10		**Glufosinate** (ammonium (+) -2-amino-4-(hydroxyl methyl phosphinyl) butanoate	51276-47-2 / 77182-82-2 / 53369 / 07-6	10000	5(b) Pesticide (Herbicide)
11		**Sulphur WDG (Wettable Dispersible Granule)** (Sulfur)	7704-34-9	30000	5(b) Pesticide (Fungicide)
A. Pesticide (Technical)Total Quantity				**104000**	
Pesticide Intermediate 5(b) - EC Required as per EIA Notification 2006					
12		**Dimethyl Phosphoroamidothioate (DMPAT) (O,O-Dimethyl phosphoramidothioate)**	17321-47-0	30000	5(b) Pesticide Intermediate Chemical
		Isocyanates / Chloroformates			
13	13.1	**3-Chloro Phenyl Isocyanate** (1-Chloro-3-isocyanatobenzene)	2909-38-8	20000 (either or / and	5(b) Pesticide

	13.2	**M-Tolyl Isocyanate** (M-Tolyl Isocyanate)	621-29-4	combined capacity	Intermediate Chemical
	13.3	**Phenyl Isocyanate** (Isoyanatobenzene)	103-71-9		
	13.4	**3-Chloro-4 Methyl Phenyl Isocyanate** (3-Chloro-4 Methyl Phenyl Isocyanate)	28479-22-3		
	13.5	**Isopropyl Phenyl Isocyanate** (p-Isopropylphenyl isocyanate)	31027-31-3		
	13.6	**Hexa Methylene Di Isocyanate** (1,6-diisocyantohexane)	822-06-0		
	13.7	**3,5 dichloro phenyl isocyanate** Or/ (1,3-dichloro-5-isocyanatobenzene)	34893-92-0		
	13.8	**2,6 Di Isopropyl phenyl isocyanate** Or/ and (2,6 Di Isopropyl phenyl isocyanate)	28178-42-9		
	13.9	**Ortho Chloro Phenyl Isocyanate** (2-Chlorophenyl isocyanate)	3320-83-0		
	13.10	**Para Toluene Sulfoynyl Isocyanate** (Tosyl isocyanate)	4083-64-1		
	13.11	**Hexyl Isocyanate** (1-hexyl isocyanate)	2525-62-4		
	13.12	**Phenyl Chloro Formate** Or/ and (Chloroformic acid phenyl ester)	1885-14-9		
	13.13	**Cyclo Hexyl Alkyl Di isocyanate** (Cyclohexane, 1,4-bis(isocyanatomethyl))	10347-54-3		
	13.14	**Benzophenone** (Diphenyl ketone)	119-61-9		
14	**Tri Methyl Phosphite** (TMP) / (Trimethoxyphosphine)		121-45-9 /	5000	5(b) Pesticide Intermediates chemicals
	Tri Ethyl Phosphite (TEP) (Tri Ethoxy Phosphine)		122-52-1		
15	**Di Methyl Sulfoxide** (Dimethyl Sulfoxide)		67-68-5	10000	5(b) Pesticide Intermediate Chemical
16	**Acrolein** (2-Propenal)		107-02-8	2000	5(b) Pesticide Intermediate Chemical
B. Pesticide Intermediate 5(b)Total Quantity				67000	
Intermediate Chemicals 5(f) - EC Required as per EIA Notification 2006					
17	**Ethylenediamine (EDA)** (1,2-Diaminoethane)		107-15-3	30000	5(f) Intermediate Chemical

18	**Meta Phenoxy Benzaldehyde** (MPBAD) (3-phenoxy benzaldehyde)		39515-51-0	3000	5(f)Intermediate Chemical
19	**Methoxy Methyl Acrylate (MAM)** (Methyl 3-methoxyacrylate)		34846-90-7	1000	5(f)Intermediate Chemical
20	**Aminoacetonitrile Sulfate (AANS)** (Aminoacetonitrile bisulfate)		5466-22-8	1000	5(f)Intermediate Chemical
21	Acid Chloride				
	21.1	**Chloroacetyl Chloride** (Monochloroacetyl chloride)	79-04-9	3000	5(f)Intermediate Chemical
	21.2	**Methoxyacetyl Chloride** (Methoxyacetyl chloride)	38870-89-2	400	
	21.3	**2-Chloro-3, 3-tri fluoropropen-1,2 dimethylcyclopropane Carbonyl chloride** (cyclopropanecarbonyl chloride, 3-[(1z)-2-chloro-3,3,3-trifluoro-1-propen-1-yl]-2,2-dimethyl-, (1r,3s))	78246-90-9	600	
	21.4	**DV Acid Chloride** (3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarbonyl Chloride)	52314-67-7	1000	
22	**CS2 Based Product**				
	22.1	**Potassium Ethyl Xanthate** (Potassium Ethyl Xanthate)	140-89-6	5000 (either or / and combined capacity)	5(f)Intermediate Chemical
		Sodium Isopropyl Xanthate (Sodium isopropyl xanthate)	140-93-2		
		Potassium Isopropyl Xanthate (Isopropylxanthic Acid Potassium Salt)	140-92-1		
		Potassium Amyl Xanthate (Dithiocarbonic Acid)	2720-73-2		
	22.2	**Dimethyl Cyanoiminodithiocarbonate (CCITM)** (N-Cyano-S,S-dimethyldithioimidocarbonate)	10191-60-3	1000	
	22.3	**1,6-Bis (N,N-dibenzylthiocarbamyldithio) hexane** (N-Cyano-S,S-dimethyldithioimidocarbonate)	151900-44-6	2000	

	22.4	**1-Methylamino-1-Methylthio-2 Nitroethene** (n-methyl-1-(methylthio)-2-nitrovinylamine)	61832-41-5	2000	
23	23.1	**Sodium Cyanide** (Sodium Cyanide)	143-33-9	5000	5(f) Specialty Chemical
	23.2	**Potassium Cyanide** (Potassium Cyanide)	151-50-8	500	5(f) Specialty Chemical
	23.3	**Cyanuric Chloride** (Cyanuric Chloride)	108-77-0	15000	5(f) Specialty Chemical
	23.4	**DL-Methionine** (DL-2-Amino-4-(methylthio)butyric acid)	59-51-8	10000	5(f) Specialty chemical
C. Intermediate & Specialty Chemicals Total Quantity				**80500**	
24	Captive Power Plant (3 Nos.)			55 MWPH (Phase-1 (20) + Phase-2 (20) + Phase-3 (15) MWPH)	1(d)Power plant
Total quantity (A+B+C) (EC required)				**251500**	
25	*Liquid formulations			20000	Pesticide Formulation
26	*Solid Formulations			20000	
D. #Pesticide Formulation Total quantity #				**40000**	
TOTAL (A+B+C+D)				**291500**	

S. No.	By product	Capacity (MTPA)
1.	Piperazine (PIP)	9510
2.	Diethylenetriamine (DETA) - (95-99%)	3300
3.	Amino Ethyl Piperazine (AEP) - (95-99%)	1650
4.	Amino Ethyl Ethanol Amine (AEEA) - (95-99%)	990
5.	Hydroxy Ethyl Piperazine (HEP) - 98%	660
6.	Ammonium Sulphate Solution- 10-20%	18435
7	Ammonia Solution – 10%	5979.6
8.	Aluminium Hydroxide	579.96
9.	Potassium Chloride (25-30%)	1749.96
10.	Methyl acetate - (95-99%)	3810
11.	Methanol (98-99 %)	1266
12.	Anhydrous Ammonia or	2075.04
13.	20% aqs. Ammonia	10379.04
14	Ammonium Chloride soln - 15-20%	43521.24
15.	Calcium chloride solution 30% or	24000
16.	Calcium Chloride powder	8000.04

17.	Di Calcium Phosphate (DCP) Sludge	540
18.	Aluminium Chloride solution –(20-25%)	8454
19.	Meta Bromo Benzaldehyde - (95-99%)	1290
20.	Aqs. Potassium Chloride (20-25%)	7770
21.	Dimethoxy methane - (95-99%)	722.04
22.	Ammonium acetate (28-35%)or	70680
23.	Acetic Acid & Ammonium sulphate - (95-99%)	83400
24.	Ammonium sulphate & Sodium Acetate (30%)	106560
25.	Hydrochloric Acid sol. (28-32%)	65817.96
26.	Methyl Mercaptan	710.04
27.	Steam	1382400
28.	30% Hydrochloric Acid Solution	3156
29.	30% Hydrochloric Acid Solution	440.04
30.	30% Hydrochloric Acid Solution	276
31.	30% Hydrochloric Acid Solution	527.04
32.	31% Sodium Sulphite Solution	14377.8
33	Ethyl Acetate sol. (90-95%)	6000
34	Ammonia sol.-20%	600
35	Ammonium Chloride	26559.96
36.	Magnesium Chloride Sol. (25-28%) OR	33159.96
37.	Magnesium chlorate -50%	33159.96
38.	40% Ammonium sulphate	1061.04
39.	40% Ammonium sulphate	79.8
40	40% Ammonium sulphate	2415
41.	30% Hydrochloric Acid solution	29676

Day One - 29th October, 2018

42.3 Environmental Clearance

Agenda No.42.3.1

Expansion of existing distillery plant from 200 KLPD to 350 KLPD (Molasses/Grain based) along with 10.5 MW (3 MW Existing &7.5 MW New) co-generation power plant at Bijnor, Uttar Pradesh by M/s Dhampur Sugar Mills- For Environmental Clearance

[IA/UP/IND2/71876/2017, IA-J-11011/586/2017-IA-II(I)]

42.3.1.1 The Project Proponent and their consultant M/s Enviro Infra Solutions Pvt Ltdmade a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for Expansion of Existing Distillery Plant from 200 KLPD to 350 KLPD (Molasses/Grain Based) along With 10.5 MW (3 MW Existing & 7.5 MW New) Co-Generation Power Plant at village Alhaipur, Tehsil - Dhampur and District Bijnor, Uttar Pradesh by M/s Dhampur Sugar Mills Limited, Dhampur, Chemical Division.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 33rd meeting held during 22nd January 2018 and recommended Terms of Reference (ToRs)

for the Project. The ToR has been issued by Ministry vide letter No.J-1011/586/2017-IA-II(I) dated 28th January, 2018.

(iii) All projects related to Distilleries are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry had issued EC earlier vide letter no. J-11011/605/2007-IA II(I) dated 17-09-2007 to the project Expansion of existing 100 KLPD plant to 200 KLPD Distillery unit at village Alhaipur, Tehsil Dhampur, District Bijnor, Uttar Pradesh in favour of M/s M/S Dhampur Sugar Mills Limited, Dhampur, Chemical Division.

(v) Existing land area is 160000 sqm and no additional land will be used for proposed expansion.Industry has already developed greenbelt in an area of 33 % i.e., 52600 sqmout of total area of the project.

(vi) The estimated project cost is Rs. 151.65 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 70.13 crores and the Recurring cost (operation and maintenance) will be about Rs. 2.75 crores per annum.

(vii) Total Employment will be for 200 persons as direct & 100 persons indirectly after expansion. Industry proposes to allocate Rs. 83 Lakhs @ of 1 % towards Corporate Social Responsibility.

(viii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Khoh is flowing at a distance of 3.2 km in North direction.

(ix) Ambient air quality monitoring was carried out at 08 locations during 01-12-2017 to 28-02-2018 and the baseline data indicates the ranges of concentrations as: PM10 (92.0- 62.0 $\mu g/m^3$), PM2.5 (44.2 – 27.5$\mu g/ m^3$), SO2 (12.85 – 8.0 $\mu g/ m^3$) and NOX (19.2 – 7.2 $\mu g/ m^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.5 $\mu g/ m^3$ and 9 $\mu g/ m^3$ with respect to PM, Sox . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement is 6050 m3/day of which fresh water requirement of 3275 m3/day will be met from ground water.

(xi) Effluent of 2775 KLD quantity will be treated through ETP and slope boiler. The plant will be based on Zero Liquid discharge system.

(xii) Power requirement after expansion will be 10500 KVA including existing 3000 KVA and will be met from captive power plant.

(xiii) Existing unit has 40 TPH incinerator fired boiler. Additionally 75 TPH incinerator fired boiler will be installed. Bag filter with a stack of height of 84 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm3 for the proposed boilers.

(xiv) Details of Process emissions generation and its management is given below in table:

S.No.	Item	Capacity	Process	Emission
1	Air pollution	75 TPH	Boiler	50 mg/Nm3

(xv) Details of Solid waste/ Hazardous waste generation and its management is given below in table

Solid Waste Generation & Management:					
S. No.	**Item**	**Quantity Per Annum**	**Distance from Site**	**Mode of Transport**	**Mode of Disposal**
1	Solid waste	940 MT/Day	At site	Road	Yeast sludge will be used in incinerator boiler & Boiler furnace ash will be used as manure/fly ash brick.
2	Hazardous waste	3.5 KL/year	At site	Road	It will be stored on site and sold to authorized recyclers

(xvi) Public hearing for the proposed project has been conducted by the State PollutionControl Board on 28-05-2018. The main issues raised during the public hearing are related to the negative impact on farmers and people of project area after the expansion of capacity of Distillery plant, pollution from effluents, emission of fly ash, adverse / unfavourable effect on labour and staff etc.

(xvii). Details of Certified compliance report submitted by RO, MoEF&CC.

Details of certified report on compliance of earlier environmental clearance conditions			
(i)	Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on compliance of earlier environmental clearance conditions		MoEFCC, Regional Office, Kendriya Bhawan, Fifth Floor, Sector-H ,Aliganj, Lucknow.
(ii)	Letter No		VII/ENV/UP/Ind-34/106/1997
(iii)	Status of Compliance		Done
(iv)	Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report) (*Upload pdf only*)		yes
(v)	Date of site visit		June, 2018

(xvii) No Litigation Pending against the proposal

(xviii) The details of products and capacity as under:

S. No	Product	Existing	Proposed	Total
1	Distillery Plant	200 KLD	150 KLD	350 KLD
2	Power Plant	3 MW	7.5 MW	10.5 MW

42.3.1.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of Molasses/Grain based Distillery from 200 KLPD to 350 KLPD and Co-Generation Power Plant from 3 MW to

10.5 MW by M/s Dhampur Sugar Mills Limited in a total area of 160000 sqm located at Village Alhaipur, Tehsil Dhampur, District Bijnor (Uttar Pradesh).

The project/activity is covered under category A of item 5 (g) 'Distilleries'of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 28th January, 2018. Public hearing was conducted by the SPCB on 28th May, 2018.

Total water requirement is estimated to be 6050 cum/day, including fresh water requirement of 3275 cum/day proposed to be met from ground water. Permission for ground water withdrawal of 2400 cum/day has been obtained from the CGWA vide letter dated 8th April, 2016 and request for additional 875 KLD has been submitted vide letter dated 20th August, 2018.

Effluent of 2775 KLD will be treated through MEE followed by incineration in slop fired boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Earlier, the Ministry had granted EC vide letter dated 17th September, 2007 to the project for expansion of existing 100 KLPD plant to 200 KLPD Distillery unit at Village Alhaipur, Tehsil Dhampur, District Bijnor, Uttar Pradesh in favour of M/s Dhampur Sugar Mills Limited, Dhampur, Chemical Division. The monitoring report on compliance status of EC conditions (site visit June, 2018) has been forwarded by the Regional Office at Lucknow vide their letter dated 3rd July, 2018.

The same reflects non-compliance of EC conditions, in respect of number of operating days, spent wash treatment during monsoon season, submission of AAQ, ground water quality, noise quality etc data.

42.3.1.3 *The EAC, after deliberations, desired for clarifications/inputs in respect of the following:-*

- *Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations.*
- *Non-compliance of the conditions stipulated in the EC dated 17th September, 2007 in respect of number of operating days for the distillery.*
- *Action Taken Report submitted to the Regional Office on their observations contained in their monitoring report dated 3rd July, 2018.*
- *Comparative statement of environmental concerns/impacts including water balance and spent wash treatment mechanism in different scenario i.e. utilizing different proportions of molasses and/or non-molasses.*

The proposal was, therefore, deferred for the needful on the above lines.

Agenda No.42.3.2

Establishment of Distillery of 30 KLPD Rectified Spirit/ENA/Ethanol and 1 MW Co-generation power at, Kacharewadi, Taluka Mangalwedha, District Solapur (Maharashtra) by M/s Utopian Sugars Limited - For Environmental Clearance

[IA/MH/IND2/30081/2015, J J-11011/223/2015-IA II (I)]

42.3.2.1 The project proponent and their consultant M/s Dr Subbarao's Environment Center, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for Establishment of distillery of 30 KLPD (Rectified Spirit/ ENA/ Ethanol) and 1 MW Co-generation power plant atKacharewadi, Taluka Mangalwedha, District Solapur, Maharashtra by M/s Utopian Sugars Limited.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 1st meeting held during 30th November 2015 to 1st December 2015 and recommended Terms of Reference for the Project. The ToR has been issued by Ministry vide letter dated 28th December 2015.

(iii) The project proponent applied for amendments in ToRs for Spent wash treatment vide USL/Admin/207/2017-18 dated 27th June 2017 from "Composting" to "Concentration and Incineration" technology which was approved in 26th meeting of Expert Appraisal Committee held during 27th-28th July 2017.The project proponent further requested the Ministry for change in the location of Distillery Unit (Gat No. 385), the newly purchased land, adjacent to owned land of (Gat No.386). The request was approved in 34thmeeting of Expert Appraisal Committee held during 26-28 February, 2018.

(iv) All molasses based distillery projects are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee(EAC).

(v) Total land available for the project is 344400 sqm. Industry will develop green belt in an area of 33% i.e. 115000 m^2 out of total area of the project.

(vi) The estimated project cost is Rs.55 Crores. The total capital cost earmarked towards environmental pollution control measures is Rs 30 Crore and the Recurring cost (operation and maintenance) will be about Rs 2.0 Crore per annum.

(vii) Total Employment will be for 50 persons as direct & 100 persons indirectly after expansion. Industry proposes to allocate Rs.1.10 Crore @ of 2.0% towards Corporate Social Responsibility.

(viii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Nira Canal is flowing at a distance of 1 Km in N W - S E direction.

(ix) Ambient air quality monitoring was carried out at 9 locations during 1st October 2016 to 31st December 2016 and the baseline data indicates the ranges of concentrations as:PM10(18.36 to 45.11 µg/m3), PM2.5 (11.89-30.51.µg/m3), SO_2 (10.69-33.52 µg/m3) andNO_2(12.39-41.14 µg/m3) AAQ modeling study for point source and Line Source emissions indicates that the maximum GLCs after the proposed project are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement is 1183 m^3/day of which fresh water requirement of 90 m^3/day will be met from existing bore well.

(xi) Effluent (Spentwash quantity) would be Nil, as the entire spentwash will be concentrated in MEE and burnt in the incinerator boiler to achieve the Zero Liquid

discharge and also to produce 1 MW Power.

(xii) Powerrequirementafterthe establishment of the distillerywillbe0.5 MW and willbe met from its own cogeneration plant based on burning of Spentwash in Boiler along with bagasse as supporting fuel. Additionally, one 500 KVA DG set will be used as standby during power failure. Stack height of 6.5 meters shall be provided as per CPCB norms to the proposed DG sets.

(xiii) Existing sugar unit has 82.5 TPH bagasse fired boiler, equipped with ESP and stack of height of 72.5 m for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3 for the existing 82.5 TPH Boiler. One 10 TPH incinerator boiler shall be installed and connected to the existing stack of 72.5 m of Sugar unit.

(xiv) The process emissions of CO_2 from fermenters shall be recovered as by product.

(xv) Solid waste generated due to existing sugar unit is press mud and boiler ash which are used as manure/Soil conditioner. Excess Ash, if any shall be sold to Brick manufacturers. Incineration boiler ash shall be around 8 MT/day, will be sold to Fertilizer units. Fermenter sludge of 1 MT/day shall be sold as manure.

(xvi) Public Hearing for the proposed project has been conducted by the Maharashtra State Pollution Control Board on 29th May 2018. Two of the participants of the Public Hearing raised the issue related to the Fly ash and the blackish suspended matter are spreading since last 2-3 months, near Dongargaon area, which may result into harmful and severe effects, and requested the management to visit the place. The project proponent told that ESP was installed for the Sugar unit having an efficiency of 99.99%. Besides, online continuous monitoring system is also installed for PM. If the results are exceeding, the CPCB/MPCB sends alert, and project proponent did not receive any such alerts from the CPCB/MPCB. Monthly self monitoring results also do not exceed the consented Standards. All the remaining participants approved the proposed establishment of the Distillery unit.

(xvii) No Litigations against the project proponent.

(xviii) The details of products and capacity asunder:

S. No	Product	Quantity (KLPD)
1	Rectified Spirit or	30
	ENA or	30
	Ethanol	30
2	Co-generation Power	1 MW

42.3.2.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for establishment of 30 KLPD (RS/ENA/Ethanol) distillery and 1 MW Co-generation power plant by M/s Utopian Sugars Limited in a total area of 344400 sqm (34.44 ha) located at Kacharewadi, Taluka Mangalwedha, District Solapur (Maharashtra).

The project/activity is covered under category A of item 5 (g) 'Molasses based distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 28th December 2015. Public hearing was conducted by the Maharashtra State Pollution Control Board on 29th May 2018.

Total water requirement is estimated to be 1183 cum/day, including fresh water requirement of 90 cum/day proposed to be met from existing bore well. Permission for ground water withdrawal of 90 cum/day has been obtained from the CGWA vide letter dated 6th April, 2017.

Entire spent wash will be treated through multi effect evaporators (MEE) followed by incineration in boiler. 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.

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 duly addressed by the project proponent.

PESO has given approval vide letter dated 16th August, 2018 for the site and layout plan of storage (Petroleum storage Class A installation) to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed 90 cum/day during season, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse.*
- *The distillery shall be permitted to operate throughout the year as proposed.*
- *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.*
- *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.*
- *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.*
- *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.*

- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 2% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.3.3

Proposed Liquid Choline Choloride manufacturing Unit at Survey No.1288, Village Lavad, Taluka Dehgam, District Gandhinaga (Gujarat) by M/s Happiness Pharmaceuticals Ltd - For Environmental Clearance

[IA/GJ/IND2/67932/2017, IA-J-11011/449/2017-IA-II(I)

42.3.3.1 The project proponent and their consultant M/s TR Associates made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for Setting up Liquid Choline Chloride (75%)Manufacturing Unit at Survey No.1288, Village Lavad, Taluka Dehgam, District Gandhinagar (Gujarat) by M/s Happiness Pharmaceuticals Limited.

(ii) The project proposal was recommended for Terms of Reference (ToR) and ToR has been issued by Ministry vide letter no. IA-J-11011/449/2017-IA-II (I) dated 16/11/2017.

(iii) All Synthetic Organic Chemicals Industry projects, located outside the notified industrial area/estate and not fall into Small Scale Unit criteria are listed at S. N. 5(f) of schedule of Environmental Impact Assessment (EIA) notification under Category 'A' and are appraised at Central level by the Expert Appraisal Committee (EAC).

(iv) Total 13,028 m^2 land will be used for proposed project. Industry will develop greenbelt in an area of 34.2 % i.e. 4,457 m^2 out of 13,028 m^2 area of the project.

(v) The estimated project cost is approx. Rs. 300 Lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs. 20 Lakhs and the recurring cost (operation and maintenance) will be about Rs. 7 Lakhs per annum.

(vi) Total employment opportunity will be for 10 persons. Industry proposes to allocate Rs. 6 Lakhs @ of 2.0% towards Corporate Environment Responsibility.

(vii) There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km from the project site. Meshwo River is flowing at a distance of 1.7 km in ESE direction and Khari River is flowing at a distance of 7.4 km in NNW direction from project site.

(viii) Ambient air quality monitoring was carried out at 8 locations during October, 2017 to December, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (55.05 to 84.00 µg/m^3), $PM_{2.5}$ (22.57 to 43.68 µg/m^3), SO_2 (7.18 to 33.60 µg/m^3) NO_2 (20.02 to 47.63 µg/m^3), CO (N.D.) and VOC (B.D.L.) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 7.94 µg/m^3, 0.24 µg/m^3, 1.65 µg/m^3 with respect to PM_{10}, SO_2, NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 18 m^3/day of which fresh water requirement of 18 m^3/day and which will be met from Borewell.

(x) Industrial effluent of 1.2 m^3/day will be treated through Effluent Treatment Plant followed by an Evaporator and the stated system will achieve Zero Liquid Discharge. Domestic effluent of 0.8 m^3/day will be disposed off through Septic tank/ Soak pit system.

(xi) Power requirement of proposed project will be 220 KW and will be met from Uttar Gujarat Vij Company Limited (UGVCL). D. G. Set having 250 KVA capacity will be used as standby during power failure. Stack (height 6 m) will be provided as per CPCB norms to the proposed DG Set.

(xii) Agro-Waste Briquettes fired 0.4 TPH Boiler will be installed. Multi Cyclone Separator with a stack height of 11 m will be installed for controlling the Particulate Emissions within statutory limit of 150 mg/Nm^3 for the proposed boiler.

(xiii) Details of solid waste/hazardous waste generation and its management.

S. No.	Description	Category	Quantity	Mode of Disposal

1	ETP Sludge & Evaporation Residue	35.3	7.5 MT/Annum	Collection, storage and disposal at approved TSDF Site
2	Used/Spent Oil	5.1	0.1 MT/Annum	Collection, storage and used within premises as a lubricant/sold to registered recycler.
3	Discarded Bags/Drums/Barrels	33.1	1.2 MT/Annum	Collection, storage & sold to authorized vendor.

(xiv) Public hearing for the proposed project has been conducted by the State Pollution Control Board on 30/06/2018. The main issues raised during the Public Hearing are related to impact of air pollution on surrounding agricultural crops, greenbelt development and employment to locals.

(xv) No litigation is pending against the said proposal.

(xvi) Following are the list of proposed products.

Sr. No.	Name of Product	Quantity
1	Liquid Choline Chloride (75%)	300 MT/Month

42.3.3.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up Liquid Choline Chloride (75%) manufacturing unit (feed grade) of capacity 300 TPM by M/s Happiness Pharmaceuticals Limited in a total area of 13,028 sqm located at Survey No. 1288, Village Lavad, Taluka Dehgam, District Gandhinagar (Gujarat).

Different raw materials include Tri Methyl Amine (82.5 TPM), Ethylene Oxide (52.5 TPM) and 33% HCL (165 TPM). In the first stage, aqueous HCl and anhydrous TMA gas react exothermically to yield the intermediate Trimethylamine Hydrochloride (TMA-HCl). This solution mixes with Ethylene Oxide gas in different reactor, resulting in another exothermic reaction to produce the feed grade liquid Choline Chloride (75%).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted on 16th November, 2017. Public hearing was conducted by the State Pollution Control Board on 30th June, 2018.

Total water requirement is 18 cum/day, which will be met from the ground water/borewell. Application in this regard has been submitted to the concerned authorities on 23rd April, 2018.

Effluent of 1.2 cum/day generated from Industrial operations will be treated through Effluent Treatment Plant followed by an Evaporator. Neither there will be any recycling of treated effluents nor discharge outside the premises and thus plant conforming to Zero Liquid discharge system.

42.3.3.3 *The EAC, after deliberations, desired for clarification/input in respect of the following:-*

- *Approval by PESO for the site and layout plan for Ethylene Oxide storage facilities from safety considerations.*
- *Requirement of clearance, if any, from the perspective of MSIHC Rules, 1989 and its subsequent amendments, for handling and storage of Ethylene Oxide more than the threshold storage of 5 MT,*

The proposal was, therefore, deferred for the needful on the above lines.

Agenda No.42.3.4

Establishment of new Molasses based distillery of 100 KLD capacity along with 3.5 MW co gen power at village Malakpur, Block & Tehsil Baraut, Distt Baghpat (UP) by M/s SBEC Sugar Limited, Distillery Unit - For Environmental Clearance

[IA/UP/IND2/68145/2017, IA-J-11011/455/2017-IA-II(I)

42.3.4.1 The project proponent and their consultant M/s Ascenso Enviro Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for establishment of a molasses based Distillery of 100KLPD capacity along with 3.5 MW Co Generation Power Plant at Village Malakpur, Block & Tehsil Baraut, District Baghpat (Uttar Pradesh) by M/s SBEC Sugar Limited.

(ii) ToR was issued by Ministry vide letter dated 26th Oct 2017.

(iii) All Distillery (Molasses Based) are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Land area: 48562.0 m2 will be used for proposed distillery establishment. Industry will develop greenbelt in an area of 33 % i.e., 16025.0 m2 out of total area of the project.

(v) The estimated project cost is Rs 105 crore. Total capital cost earmarked towards environmental pollution control measures is Rs 35 crores and the Recurring cost (operation and maintenance) will be about Rs 2 crores per annum.

(vi) Total employment will be for 155persons as direct & 150 persons indirectly after establishment. Industry proposes to allocate Rs 162.0 Lakh @ of 1.6 % towards Corporate Environmental Responsibility.

(vii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Yamuna is flowing at a distance of 7.99 km in west direction and interstate border of Haryana and Uttar Pradesh at distance of 7.95 km in west direction.

(viii) Ambient air quality monitoring was carried out at Eight (08) locations during 1st October 2017 to 31st December 2017 and the baseline data indicates the ranges of concentrations as: PM10 (45.7 – 82.8 µg/m3), PM2.5 (28.6 – 46.8 µg/m3), SO2 (7.0 – 18.6 µg/m3) and NO2 (9.2 – 22.6 µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.87 µg/m3, 2.52 µg/m3 and 2.50 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 2969 m3/day of which fresh water requirement is 780.0 m3/day (@ 7.8 KL/KL od product) will be met from Ground water.

(x) Effluent: spent wash of 766.0 KLD (@ 7.6 KL/KL of Products) quantity will be treated through Concentration in MEE then concentrate from MEE will be incinerated in Slop fired boiler capacity: 35.0 TPH. The plant will be based on Zero Liquid discharge system.

(xi) Other Effluent: Like MEE condensate, cooling tower and boiler blow down, floor washing etc will be treated in Condensate Polishing Unit.

(xii) Power requirement for establishment of Distillery will be 2860.0 KW. Two number of DG sets of capacity: 1000.0 KVA (01) & 500.0 KVA (01) are used as standby during power failure. Stack (height 6.0 m above roof top) will be provided as per CPCB norms to the proposed DG sets.

(xiii) 35.0 TPH (01 No) Slop fired boiler will be installed. Bag filter with a stack of height of 50.0 m will be installed for controlling the particulate emissions within the statutory limit of 150.0 mg/Nm3 for the proposed boilers.

(xiv) From Process Carbon Di Oxide will be generated. Approx.: 76.0 TPD Carbon di oxide would be recovered from the process which will be sold in the market.

(xv) Details of Solid waste: Ash : 48.72 MT/Day, it would be mixed with fermenter sludge and utilized as manure due to its high potash content.

(xvi) Hazardous waste generation, used oil and Grease is the only hazardous waste generated in the industry and will be provided to the authorised vendor for end disposal.

(xvii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 04. July.2018. The main issues raised during the public hearing are related to Air pollution, Water pollution, Fly ash disposal and employment in the local area.

(xviii) No Litigation Pending is pending against the proposal.

(xix) The details of products and capacity as under:

Product	**Quantity**	**Mode of Transport/ Transmission of Product**
RS/ENA/Ethanol (AA)	100 KLD	By road Transport
Co-generation plant	3.5 MW	In-house Use

42.3.4.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up a molasses based distillery of 100 KLPD capacity along with 3.5 MW Co Generation Power Plant by M/s SBEC Sugar Limited in a total area of 48562 sqm located at Village Malakpur, Tehsil Baraut, District Baghpat (Uttar Pradesh).

The project/activity is covered under category A of item 5 (g) 'Molasses based distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 26th October, 2017. Public hearing was conducted by the SPCB on 4th July, 2018.

Total water requirement is estimated to be 2969 cum/day, including fresh water requirement of 780 cum/day (7.8 KL/KL of alcohol) proposed to be met from ground water, which will be reduced to 650 cum/day. Application in this regard has been submitted to the concerned regulatory authority on 10th September, 2018.

Spent wash of 766 cum/day will be treated through multi effect evaporators (MEE) followed by incineration in slop fired boiler of capacity 35 TPH. 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 1.6% 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 the public hearing have been duly addressed by the project proponent.

Application for prior approval of licence to import and store petroleum/ethanol has been submitted to O/o Chief Control of Explosives/ PESO vide letter dated 28th October, 2018.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed* 650 cum/day, *proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse.*
- *The distillery shall be permitted to operate throughout the year as proposed.*
- *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.*
- *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.*
- *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.

- *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.

- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 1.6% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No. 42.3.5

Proposed 30 KLPD Molasses Based Distillery Project at Agasti Nagar, Taluk Akole, District Ahmednagar, Maharashtra by M/s Agasti Sahakari Sakhar Karkhana Ltd - For Environmental Clearance

42.3.5.1 The project proponent and their consultant M/s Ultra Tech, Environment Consultancy and Laboratory made a detailed Presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance of the project for setting up 30 KLPD Molasses based Distillery at Agasti Nagar, Taluka Akole, District Ahmednagar (Maharashtra) by M/s Agasti Sahakari Sakhar Karkhana Ltd.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its17th EAC meeting dated 28th December,2016 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter No.J F.NO J-II011/329/2016-IA.II (I)]; dated 31st May 2017

(iii) Project listed at S.N 5 (g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Total area available for the project is 52.21 ha. Industry will develop greenbelt in an area of 33 % i.e. existing 15 ha & 2 ha.

(v) The estimated project cost is Rs 49.98 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 5Cr and the recurring cost (operation and maintenance) will be about Rs 2Cr per annum.

(vi) Total Employment opportunity will be for 64 persons. Industry proposes to allocate Rs 1.25 Cr @ of 2.5 % towards Corporate Social Responsibility.

(vii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Pravara River is flowing at a distance of 4 km in North direction.

(viii) Ambient air quality monitoring was carried out at 9 locations during January to March 2017 and the baseline data indicates the ranges of concentrations as: PM10 (52 µg/m^3 to 77 µg/m^3), PM2.5 (22 µg/m3 to 42 µg/m^3), SO2 (11 µg/m^3 to 27 µg/m^3) and NO2 (Nox:15 µg/m^3 to 32 µg/m^3) AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.37 µg/m3 with respect to PM10. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 482 m3/day of which fresh water requirement of 282 m3/day will be met from Pravara River.

(x) Effluent of 240 m3/day quantity will be treated through Bio methanation, MEE and Bio composting. The plant will be based on Zero Liquid discharge system.

(xi) Power requirement a will be 1.2 MW and will be met from own 10 TPH boiler, additionally 2 DG sets of 500 KVA will be used as standby during power failure. Stack (height 60) will be provided as per CPCB norms to the Proposed DG sets.

(xii) New 10 TPH boiler will be installed. ESP with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers

(xiii) Details of Process emissions generation and its management: CO2 emission from process will be recovered and bottled. 20 T capacity plant will be installed.

(xiv) Details of Solid waste/ Hazardous waste generation and its management

Sr No	Name of waste	Quantity	Treatment and disposal
1	Bagasse from existing sugar unit	120000 MT	Used as fuel Boiler
2	Press Mud	18000 MT	Compositing and used as soil conditioner
3	ETP sludge	20 MT	Used for landscaping

(xv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 8th September, 2017. The main issues raised during the public hearing are related to employment & pollution generation.

(xvi) No litigation is pending against the proposal.
(xvii) The details of products and capacity as under:

Products	Quantity KLPD
RS/AA/ENA	30

42.3.5.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up 30 KLPD (RS/ENA/AA) molasses based distillery by M/s Agasti Sahakari Sakhar Karkhana Ltd in a total area of 52.21 ha located at Agasti Nagar, Taluka Akole, District Ahmednagar (Maharashtra).

The project/activity is covered under category A of item 5 (g) 'Molasses based distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 31st May, 2017. Public hearing was conducted by the SPCB on 8th September 2017.

Total water requirement is estimated to be 482 cum/day, including fresh water requirement of 282 cum/day proposed to be met from Pravara river, which will be reduced to 240 cum/day during off season. Permission for surface water withdrawal of 0.42 MCM from Pravara river has been obtained from the State Water Resource Department, Government of Maharashtra vide letter dated 23rd August, 2018.

Spent wash will be treated through bio-methanation, multi effect evaporators (MEE) followed by bio-composting. 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.

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 duly addressed by the project proponent.

Application for prior approval of licence to import and store petroleum/ethanol has been submitted to O/o Chief Control of Explosives/PESO vide letter dated 31st October, 2018.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed 240 cum/day during off-season, proposed to be met from Pravara river. Prior permission shall be obtained from the concerned regulatory authority in this regard.*
- *The spent wash after bio-methanation shall be taken to multi effect evaporators (MEE) followed by bio-composting.*
- *Number of working/operating days for the distillery shall be 270 days as proposed. However, the same may be increased to 330 days/round the year subject to compliance of the Standard Operating Procedure for the bio-composting yard issued by the CPCB vide letter dated 9th August, 2018, and the same is ensured by the State Pollution Control Board while considering consent to operate.*
- *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.*
- *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.*
- *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.*
- *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.*
- *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.*

- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 2% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.3.6

Expansion of existing molasses based distillery from 36.0 KLD to 74.0 KLD (AA/ENA/RS) & establishment of new grain based distillery of 60.0 KLD along with co- generation of Power: 6.0 MW Within existing premises of Distillery Superior Industries Limited located at Clutterbuck Ganj, 6th KM, Rampur Road, Bareilly (U.P) by M/s Superior Industries Limited - For Environmental Clearance

[IA/UP/IND2/73830/2018, IA-J-11011/124/2018-IA-II(I)]

42.3.6.1 The project proponent and the accredited Consultant M/s Ascenso Enviro Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for expansion of molasses based distillery from 36KLPD to 74KLPD (AA/ENA/RS) and setting up grain based distillery of 60KLPD along with co-generation of Power plant of 6MW at CB Ganj, Bareilly by Pass, Bareilly (U.P) by M/s Superior Industries Limited
(ii) Unit will operate 330 day/annum
(iii) Standard Terms of Reference was granted for the project on 11.05.2018.

(iv) All distillery projects are listed at S.N. 5 (g) of Schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(v) The industry being in existence, prior to the EIA notification of 1994 does not require environmental clearance and certified compliance report as no EC was required in year 1990.

(vi) Existing land area is 43927 m^2land will be used for proposed expansion. Industry has developed greenbelt in an area of 33 % i.e., 14487.00 m^2 out of total area of the project.

(vii) The estimated project cost is Rs. 99.15 crores including existing investment of Rs. 60.0 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 9 crores and the recurring cost (operation and maintenance) will be about Rs 90 Lacs per annum.
(viii) Total employment opportunity will be for 50 persons as direct & 110 persons indirect after expansion. Industry proposes to allocate Rs 5.00 Crores @ of 5% towards Corporate Social Responsibility.

(ix) There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Ram Ganga river is flowing at a distance of 2.68 Kms in west direction.

(x) Ambient air quality monitoring was carried out at 8 locations during 1stFebruary 2018 to 30 April 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (78.9-97.7µg/m^3), $PM_{2.5}$ (30.5-53.7 µg/m^3), SO_2 (10.4-26.5µg/m^3) and NO_2 (12.6-29.8 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total fresh water requirement from Groundwater: Molasses Based Operation: 592.0 (@ 8.0 KL/KL of product) and Grain Based Operation: 420.0 (@ 7.0 KL/KL of product)(Net fresh water requirement after recycling)

(xii) Effluent: Molasses based operation; spent wash of 336.0 KLD quantity will be treated through Concentration in MEE then concentrate from MEE will be incinerated in Slop fired boiler. Effluent: Grain based operation; spent wash of 532.0 KLD quantity will be treated through decanter centrifuge for solid separation, supernatant will be concentrate in MEE and Concentrate from MEE, will be mixed with the Wet cake in dryer which shall be used as cattle feed. Other Effluent: Like MEE condensate, cooling tower and boiler blow down, floor washing etc will be treated in condensate treatment unit. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 2.0 MW and will be met from own cogeneration of power. Existing unit has 2 DG sets of 500 KVA, 160 KVA capacity, same DG sets are used as standby during power failure. Stack (height of 4.6 meters, 2.8 meters) is being provided as per CPCB norms to the DG sets.

(xiv) Existing unit has 9 TPH, 5 TPH biomass based boiler, which is proposed to be dismantled. A new 35 TPH slop fired boiler will be installed. Electro static precipitator with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3 for the proposed boiler.

(xv) Details of Process emissions generation and its management: The major sources of pollution are Particulate Matter (PM_{10} and $PM_{2.5}$) from proposed distillery plant based on Molasses. Proposed stack shall be of adequate height of 60 meters which shall be attached to 35 TPH slop fired boiler through proposed ESP. The PM_{10} emission from stack will be restricted below 150 mg/Nm^3.

(xvi) Details of Solid waste/ Hazardous waste generation and its management

(a) Ash (Molasses based operation): 34.4 MT/Day, it would be mixed with fermenter sludge (2.0 MT/Day) and utilized as manure due to its high potash content.
(b) Ash (Grain based operation):5.7 MT/Day.
(c) Grain residue (Grain based operation): 60.0 MT/Day, It will be used in manufacturing of cattle feed.
(d) Hazardous waste generation, used oil and Grease is the only hazardous waste generated in the industry and will be provided to the authorised vendor for end disposal.

(xvii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 04. 08.2018.The main issues raised during the public hearing are related to: Employment, Spent-Wash Management, Rain Water Harvesting, Air Pollution Control System, Existing Bio Composting Management.

(xviii) No litigation pending against the proposal

(xix) The details of products and capacity as under:

S.No.	Product	Existing	Proposed	Total
1	RS/ENA/AA (Molasses Based)	36 KLD	38 KLD	74 KLD
2	RS/ENA/AA (Grain Based)	---	60 KLD	60 KLD
3.	Power (CPP)	---	6 MW	6MW

42.3.6.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 36 KLPD to 74 KLPD (RS/ENA/AA) and setting up grain based distillery of 60 KLPD, along with co-generation of Power plant of 6 MW by M/s Superior Industries Limited in a total area of 43927 sqm located at CB Ganj, Bareilly by Pass, Bareilly (UP).

The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 11th May, 2018. Public hearing was conducted by the SPCB on 4th August, 2018.

Total estimated water requirement during molasses based operations will be 1030 cum/day of which fresh water requirement will be 592 cum/day. For grain based operation, total estimated water requirement would be 1000 cum/day which includes fresh water of 420 cum/day (@ 7 KL/KL) proposed to will be met from Ground water. Application in this regard has been submitted with CGWA on 18th August, 2018. The committee suggested for reducing the fresh water requirement to 481 cum/day (@ 6.5 KL/KL) for molasses and 360 cum/day (@ 6 KL/KL) grain based distillery.
During Molasses based operation, spent wash of 407 KLD will be treated through Concentration in MEE then concentrate from MEE will be incinerated in Slop fired boiler. The plant will be based on Zero Liquid discharge system. During Grain based operation spent wash of 336 KLD quantity will be will be first centrifuged for solid separation, supernatant will be concentrate in MEE and Concentrate from MEE will be mixed with the Wet cake or dried.

The expenditure towards CER for the project would be 1% 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 the public hearing have been duly addressed by the project proponent.

PESO has issued licence vide No. P/CC/UP/15/2446 (P376378) dated 7th December, 2016 in Form XV under the Petroleum Rules, 2002, which is valid till 31st December, 2020, for the storage of 70 KL Petroleum Class A in bulk.

Application for prior approval of licence to import and store petroleum/ethanol for additional storage has been submitted to O/o Chief Control of Explosives/ PESO.

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

- *Prior approval shall be obtained from the Petroleum & Explosives Safety Organization (PESO) for the site and layout plan submitted to this Ministry along with the proposal for EC. In case of any change therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Grain unfit for human consumption shall only be used for the industrial use.*
- *Total fresh water requirement shall not exceed* 592 cum/day (for molasses based) and 420 cum/day (for grain based) proposed to be met from ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse.*
- *Number of working/operating days for the distillery shall be 330 days as proposed.*
- *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.*
- *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.*
- *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.*
- *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.

- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.3.7

Expansion of existing production capacity and adding new product at Plot No. 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91 Survey No. 274, 275, 276, Tehsil & District Valsad, Gujarat by M/s Atul Ltd - For Environmental Clearance

[IA/GJ/IND2/57601/2015, J-11011/108/2015-IA II (I)]

42.3.7.1 The project proponent and their consultants M/s Eco Chem Sales & Services and M/s Kadam Environmental Consultants, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project of Expansion of existing production capacity and addition of new products at Plot No. 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91 Survey No. 274, 275, 276, Tehsil and District Valsad, Gujarat by M/s Atul Limited.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 40th meeting held during 18th-19th May, 2015 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter No. J-11011/108/2015-IA II (I); dated 3rd July 2015

(iii) All products are listed at S.N. 5 (b), 5 (f) & 4 (d) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry has issued EC earlier vide letter no. J-11011/85/2009-IA II (I); dated 13thMay, 2009 for existing unit to M/s Atul Ltd.

(v) Existing land area is 12,05,401 m^2, additional 0 m^2 land will be used for proposed expansion.

(vi) Industry has already developed greenbelt in an area of 33 % i.e., 409030 m^2 (33.93%) out of total area of the project.

(vii) The estimated project cost is Rs 265 Crores. Total capital cost earmarked towards environmental pollution control measures for proposed project is Rs 26 Crores and the Recurring cost (operation and maintenance) will be about Rs 2.60 Crores per annum.

(viii) Total Employment opportunity will be for 130-140 persons as direct & 200-300 persons indirect after expansion. Industry proposes to allocate Rs 5.45 Crores @ /2.5 % towards Corporate Social Responsibility.

(ix) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Par is flowing at a distance of 0.7 km in SE direction.

(x) Ambient air quality monitoring is carried out at 8 locations during October 2015 to December 2015 and the baseline data indicates the ranges of concentrations as: PM10 (70.2-101 µg/m3), PM2.5 (30.2-47.4 µg/m3), SO2 (16.3-25.3 µg/m3) and NO2 (20.2-31.4.µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 28358 m3/day of which fresh water requirement of 21950 m3/day will be met from Par River.

(xii) Total Effluent will be 24096 KL/Day, from that 19239 KL/Day effluent will be treated through ETP of 32 MLD. RO/MEE provide to treat 2851 KLD wastewater. 82 KLD will be going for incineration. 20514 KLD treated wastewater will be discharged to Par River through 4 km long pipeline.

(xiii) We are in advanced stages of finalizing ZLD unit for our West ETP for reducing the wastewater by 7500KLD which is expected to reduce fresh water intake by 6500-7000KLD.

(xiv) We are also actively considering use of STP water in manufacturing activities to reduce fresh water consumption substantially from the river for next 2-3 years.

(xv) Power requirement after expansion will be 56 MW, which will be met from existing captive Power plant. Existing unit has 2 DG sets of 3100 KVA and 1500 KVA capacity. Stack

height will be provided as per CPCB norms to the proposed DG sets. No additional Boiler/DG set required

(xvi) Existing unit has 263 TPH coal fired boiler. No additional Boiler/DG set required. Existing Boilers and power plant are sufficient for the proposed expansion projects.

(xvii) Details of Process emissions generation and its management: Presently the unit has installed scrubbers like Alkali, Water, Hypo, Caustic, etc., as an air pollution control device to scrub the various parameters like COCl2, Cl2, HCl, SO2, NOx from the various process stacks. Due to proposed expansion, three numbers of additional stacks will be installed for MPP plant, Pharma Plant and Flavors & Fragrances plant. The unit shall install water & alkali scrubber as APC device in MPP plant to scrub the HCl gas. The unit shall install water scrubber followed by two stage caustic scrubber with ammonia/steam injection at Pharma Plant stack and water scrubber followed by caustic scrubber Flavors & Fragrances plant.

(xviii) Details of Solid waste/ Hazardous waste generation and its management is as following

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
1.	Graphite granules from decomposer	16.1	0.0417	0	0.0417	Collection, Storage	Own TSDF
2.	Sludge from recycle unit, ground floor & sack filter	16.1	0.014	0	0.014	Collection, Storage	Own TSDF after mercury recovery (At present, we don't have Mercury cell as the same has been converted to membrane in
3.	Sludge from Demercurisation Plant	16.1	1.00	0	1.00	Collection, Storage	Recycle
4.	Membranes	16.2	6.00	0	6.00	Collection, Storage	Own TSDF
5.	Waste Resin	16.2	0.05	0	0.05	Collection, Storage	Own Incineration/Co processing/ Co processing
6.	Sulfurised Carbon	16.2	0.003	0	0.003	Collection, Storage	Own Incineration/Co processing
7.	Activated Carbon	16.2	0.0104	0	0.0104	Collection, Storage	Own TSDF
8.	Brine purification sludge	16.3	22.5	220.00	242.50	Collection, Storage	Own TSDF

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
9.	Sulphur sludge	17.1	5.83	0	5.83	Stored for melting and reuse	Reuse
10.	Hot Gas filter Ash	17.1	0.0208	0	0.0208	Collection, Storage	Own TSDF
11.	Bottom Sludge after recovery of	17.1	0.5	0	0.50	—	Own TSDF
12.	Waste Catalyst	17.2	0.083	0	0.083	Collection, Storage	Own TSDF
13.	Spent Solvents	20.2	5.00	0	5.00 kl/month	Recovery	Recovery
14.	OCBC/OCT /distillation residue	20.3	0.042	154.00	154.042	Collection, Storage	Own Incineration/Co processing / Co processing
15.	Waste residue Bulk Intermediate (meta hydroxy phenol) (Tar)	20.3	15.00	0	15.00	Sell	Sell to reuser having GPCB permission
16.	Waste residue from (Resorcinol Plant)	20.3	15.00	0	15.00	Collection, Storage	Sell to reuser having GPCB permission
17.	Urea Formaldehyde Polymer	23.1	0.25	0	0.25	—	Own Incineration/Co processing
18.	Sludge containing higher amino compound	23.1	0.417	0	0.417	—	Own Incineration/Co processing
19.	Filter cake of Epoxy resins with resin contamination	23.1	0.833	0	0.833	—	Own Incineration/Co processing
20.	Epoxy Resin (Filter Cake with resin contamination	23.1	130.29	0	130.29	Collection, Storage	Own Incineration/Co processing
21.	Aluminum Hydroxide	26.1	15.417	0	15.417	—	Own TSDF
22.	Iron sludge	26.1	80.00	0	80.00	—	Own TSDF
23.	Brass residue	26.1	0.667	0	0.667	—	Own TSDF
24.	Still / Other residue	26.1	8.67	0	8.67	—	Own Incineration/C

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
25.	Darco / filter aid sludge	26.1	2.083	0	2.083	—	Own Incineration/C
26.	Dust (Agro Plant)	26.1	3.0	0	3.0	Collection, Storage	Own TSDF
27.	Iron Residue	26.1	62.5	0	62.5	Collection, Storage	Own TSDF
28.	PER crystal residue	26.1	0.4	0	0.4	Collection, Storage	Own Incineration/C
29.	Hyflo sludge	26.1	0.5	0	0.5	Collection, Storage	Own Incineration/C
30.	Filter aid sludge for Hg	26.1	1.0	0	1.0	Recovery of mercury	Recovery of mercury
31.	Sludge from waste water Treatment	26.2	5.0	0	5.0	—	Own TSDF
32.	Dust from Air Filtration System	26.3	0.001	0	0.001	Reprocessed	Reprocessed, reused within industry
33.	Spent carbon	28.2	40.0	0	40.0	Incineration	Captive incineration/ Collections, storage, Disposal by selling to authorized cement industries for co-processing
34.	Date expired, discarded and off-specification product	28.4	0.008	0	0.008	Incineration	Own Incineration/Co processing
35.	Spent Mother Liquor	28.5	19.75	0	19.75 kl/month	—	To ETP after recovery
36.	Spent Solvent	28.6	19.75	0	19.75 kl/month	—	Solvent recovery
37.	Still / Other bottom	29.1	10.00	53.66	63.66	Incineration	Own Incineration/C
38.	Pyridine based insecticides & herbicides (Darco / Filter	29.1	3.62	0	3.62	Incineration	Own Incineration/Co processing
39.	Sulfonyl Urea (Residue)	29.1	14.27	0	14.27	Incineration	Own Incineration/C

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
40.	Triazole based Fungicides	29.1	1.28	0	1.28	Incineration	Own Incineration/Co processing
41.	Pyrethroids	29.1	0.6	0	0.6	—	Own Incineration/Co processing
42.	Hyflo	29.1	15.75	0	15.75	Collection, Storage	Own TSDF
43.	Dust from Air Filtration System	29.3	0.008	0	0.008	Collection, Storage	Own Incineration/Co processing
44.	Chemical containing residue from decontamination and	33.1	0.0008	0	0.0008	Collection, Storage	Own Incineration/Co processing
45.	Liners /Bags	33.3	9500.00	0	9500.00 No./month	Collection, Storage, Decontaminated, Detoxification	After decontamination reuse / Sell to authorized party
46.	Drums /HDPE Carboys	33.3	250.00	0	250.00 No./month		
47.	Flue gas cleaning	34.1	0.0008	0	0.0008	—	Own TSDF
48.	Toxic metal containing residue from used-ion exchange material; in water Purification	34.2	0.001	0	0.001	Collection, Storage	Own TSDF
49.	Sludge from ETP	34.3	41.667	0	41.667	—	Own TSDF
50.	Gypsum from ETP	34.3	2.00	0	2.00	—	Own TSDF
51.	MEA distillation residue	35.1	1.667	0	1.667	—	Own Incineration/Co processing
52.	Spent	35.2	0.002	0	0.002	—	Own TSDF
53.	Sludge from wet scrubber	36.1	0.02	0	0.02	—	Own TSDF
54.	Incineration	36.2	4.62	0	4.62	—	Own TSDF
55.	Sludge & filters contaminated	3.3	0.005	0	0.005	—	Own Incineration/Co processing
56.	Used oil	5.1	2.00	0	2.00 kl/month	—	sell to registered

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
57.	Wastes / residues containing oil	5.2	0.001	0	0.001	—	Own Incineration/Co processing
58.	Aluminum	B30	2.60	0	2.60	—	Own TSDF
59.	Gypsum (From Meta Hydroxy	D1	840.00	0	840.00	—	Reuse & sell to GPCB authorized actual reusers only
60.	Sodium Sulfite	D1	550.00	0	550.00		
61.	Salt from MEE	—	825.00	853.71	1,678.71	—	Own TSDF/ Sell to actual
62.	Spent Acid	D2	400.00	0	400.00	—	Collection, Storage, disposal by sell to the units having permission from CPCB, New Delhi
63.	Chemical Gypsum	34.3	4930.00 (dry basis)	0	4930.00 (dry basis)	—	Own TSDF/ Collections, storage, Disposal by selling to
64.	Copper Hydroxide wet cake	B3	40.00	0	40.00	—	Collection, Storage, Disposal by sell to the units having permission from CPCB, New Delhi under rule 11 of Hazardous waste rule 2008, Vapi
65.	Spent organic solvent	28.5	24.75	0	24.75	—	Collection, Storage, Disposal by sell to the units having permission from CPCB, New Delhi
66.	2,6 Dichloro Phenol	—	94.355	0	94.355	—	Sell to actual users

Sr No.	Description	Category	Quantity (MT/Month)			Method of storage	Method of disposal
			Existing	Proposed	Total after expansion		
67.	2,4,6-Trichloro	—	45.925	0	45.925	—	Sell to actual users
68.	p-CBSA/Na-salt Waste	—	127	0	127	—	Sell to actual users
69.	Waste from Pharma intermediates	28.1	0	28.97	28.97	—	Own Incineration/Co processing
Solid Waste							
1.	Fly Ash	—	13,127.20	—	13,127.20	Collection, Storage	Disposal at cement Manufacturing & company's own brick Manufacturing
2.	Bottom Ash	—	2,907.00	—	2,907.00	Collection, Storage	Disposal at cement Manufacturing & company's own brick Manufacturing

(xix) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 21st June 2016. The main issues raised during the public hearing is related to local employment and will be ensured.

(xx) Certified compliance report was received on 24th April 2017 from RO, MoEF and uploaded on 12th May 2017.

(xxi) No litigation is pending against the proposal.

(xxii) The details of products and capacity as under:

S. No.	Product Group	Capacity (TPM)		
		Existing	Proposed	Total
5(f)- SYNTHETIC ORGANIC CHEMICALS INDUSTRY				
A	DYES	1,300.80	583.33	1,884.13
B	BULK DRUGS & PHARMACEUTICALS	350.6	0	350.6
C	RESIN	2,990.90	441.67	3,432.57
D	OTHER CHEMICALS	20,551.60	651	21,202.60
E	FLAVORS & FRAGRANCES	0	733.32	733.32
4 (d)- CHLOR-ALKALI INDUSTRY				
F	CHLORO – ALKALI INDUSTRY	3,400.00	4,100.00	7,500.00
Category – A – 5 (b)- PESTICIDES INDUSTRY AND PESTICIDE SPECIFIC INTERMEDIATES (EXCLUDING FORMULATIONS)				
G	PESTICIDE TECHNICAL	2,644.07	261.64	2,905.71
	Total	**31,237.97**	**6,770.95**	**38,008.92**

Co product	30% HCl	**-**	417 TPM	**417 TPM**

Detailed Product list

S. No.	Product	Capacity (TPM)			Status of the Product
		Existing	Proposed	Total	
5(f)- SYNTHETIC ORGANIC CHEMICALS INDUSTRY					
A	**DYES**				
1	Azo dyes	550	0	550	
2	Sulfur Black	250	583.33	833.33	Expansion
3	Sulfur Dyes Range	25	0	25	
4	Napthol Range	75	0	75	
5	Fast Color Bases	40	0	40	
6	Disperse Dyes (Atul-East) + Disperse Dyes (Atul-West)	118.5	0	118.5	
7	Optical Brighteners	10	0	10	
8	Reactive Dyes	127.3	0	127.3	
9	Vat dyes	105	0.00	105	
Total Production Capacity of Dyes		**1,300.80**	**583.33**	**1,884.13**	
B.	**BULK DRUGS & PHARMACEUTICALS**				
1	Mabendazole	2	0	2	
2	Tolbutamide	2.5	0	2.5	
3	Quiniodochlor	15	0	15	
4	Bulk drugs & intermediates	9.6	0	9.6	
5	Diclofenac Sodium / Potassium	2.5	0	2.5	
6	Atenolol	1.7	0	1.7	
7	Fresamide	1.3	0	1.3	
8	Trimethoprim	0.9	0	0.9	
9	Para Hydroxyacetophenone	1.7	0	1.7	
10	Para Hydroxy Phenyl acetamide	3	0	3	
11	Acyclovir	5.2	0	5.2	
12	Bathenechol	5.2	0	5.2	
13	Pharma Intermediates and chemicals	300	0	300	
Total Production Capacity of Bulk Drugs & Pharmaceuticals		**350.6**	**0**	**350.6**	
C.	**RESIN**				
1	Epoxy Resin	2,500.00	100	2,600.00	Expansion
2	Vinyl Ester Resins	37.5	0	37.5	
3	Ketone Formaldehyde Resins &Sulphonamide, Formaldehyde Resins	20.8	0	20.8	

4	UF/MF/PF/ Di Cyanadiamide Resins	270.9	0	270.9	
5	Polyamide Resins	161.7	0	161.7	
6	Polygrip rubber based	0	300	300	New
7	Polygrip TPU based	0	41.67	41.67	New
Total Production Capacity of Resin		**2,990.90**	**441.67**	**3,432.57**	
D.	**OTHER CHEMICALS**				
1	Anthraquinone, Naphthalene, Benzene Intermediates. (including Beta – Napthol & BON Acid)	740	0	740	
2	M Hydroxy Phenol	460	0	460	
3	Anisole	0	166	166	New
4	1,3 Cyclohexanedione	0	80	80	New
5	Resoform P-18				
6	Resoform P-19	0	85	85	New
7	Resoform P-20				
8	Carbamite	30	0	30	
9	Chlorzoxazone & other related products	5	0	5	
10	Agro, Pharma intermediates, Isocyanats& Carbonate esters, chloroformats etc.	100	315.00	415	Expansion + New
	Trans-4-MCHI	----			
	p-Anisylchloroformate				
	DI-TERT-BUTYL DICARBONATE (Boc. anhydride)				
	N, N- Disuccinimidyl Carbonate				
11	HX-13059	0	5	5	New
12	4 Ethyl 2,3 – Diocopiperazino carbonyl chloride	3.3	0	3.3	
13	IminoDibenzyl 5 Carbonyl Chloride	0.8	0	0.8	
14	Other chemicals (DCP, MCA, MEA, DEA, PCl3, PAA, MAP etc.)	425	0	425	
15	Formaldehyde and base products	3200	0	3200	
16	Sulfuric acid / Oleum / Chlorosulphonic acid & salts	11,550.00	0	11,550.00	
17	Sulpha drug intermediates	193.8	0	193.8	
18	Acetyl Sulphanilyl Chloride & its	1,500.00	0	1,500.00	

	derivatives				
19	Acetanilide	500	0	500	
20	Sulpha Methyl Phenazole Sodium	1.1	0	1.1	
21	Pyrazole Base	10.5	0	10.5	
22	Sulphanilic acid	25	0	25	
23	Bisphenol A	416.7	0	416.7	
24	Hexamine	150	0	150	
25	Epoxy Intermediates	23.8	0	23.8	
26	Hardener & Auxiliaries	500	0	500	
27	Hardener & Intermediates	700	0	700	
28	Bisphenol S & Intermediate Chemicals	16.6	0	16.6	
Total Production Capacity of Other Chemicals		**20,551.60**	**651**	**21,202.60**	
E.	**Flavors & Fragrances**				
1	Anethole	0	166.66	166.66	New
2	Avobenzone	0	83.33	83.33	New
3	Raspberry Ketone	0	100	100	New
4	P-AnisylPropanal	0	100	100	New
5	Octacrylene	0	83.33	83.33	New
6	OctylMethoxyCinnamate	0	200	200	New
Total Production Capacity of Flavors & Fragrances		**0**	**733.32**	**733.32**	
4 (d)- CHLOR-ALKALI INDUSTRY					
F.	**CHLORO – ALKALI CHEMICALS**				
1	Caustic soda / Potash & Sodium Sulfide	1,800.00	2,200.00	4,000.00	Expansion
2	Liquid Chlorine / HCl	1,600.00	1,900.00	3,500.00	Expansion
Total Production Capacity of Chloro – Alkali Chemicals		**3,400.00**	**4,100.00**	**7,500.00**	
Category – A – 5 (b)- PESTICIDES INDUSTRY AND PESTICIDE SPECIFIC INTERMEDIATES (EXCLUDING FORMULATIONS)					
F.	**PESTICIDE TECHNICAL**				
1	Carbamate group of Agrochemicals	33.3	10	43.3	Expansion
2	Diuron	20	200	220	Expansion
3	Isoproturon	8.3	-8.3	0	Deletion
4	Metoxuron	8.3	-8.3	0	Deletion
5	Trichlo Carbon	8.3	0	8.3	
6	Cartap. HCl	50	0	50	
7	Carbendazim	20.9	0	20.9	
8	Herbicides (2,4 – D & related products)	1,670.00	0	1,670.00	
9	Pyridine based insecticides & Herbicides chemical Imidacloprid	25	4.16	29.16	Expansion
10	Triazole based	1.67	0	1.67	

	Fungiside				
11	Pyrethroides	10	0	10	
12	Sulphonyl Urea	25	10.25	35.25	Expansion
13	MCPA	500	0	500	
14	Glyphosate	50	15	65	Expansion
15	Isoprothiolane	8.3	10	18.3	Expansion
16	Fipronil	5	0	5	
17	Formulation	200	0	200	
18	Pyrazosulfurone	0	0.5	0.5	New
19	BisPyribac Sodium	0	0.83	0.83	New
20	Azoxystrobin	0	2.08	2.08	New
21	Quizalofop	0	1.25	1.25	New
22	Thiamethoxam	0	10	10	New
23	Metribuzine	0	10	10	New
24	Diafenthiurone	0	4.17	4.17	New
Total Production Capacity of Pesticide Technical		**2,644.07**	**261.64**	**2,905.71**	
Grand Total		**31,237.96**	**6,770.95**	**38,008.91**	
	30% HCl (By Product)	---	417	417	New

Expansion
New
Delete

42.3.7.2 The proposal was earlier considered by the EAC (Industry-2) in its meetings held on 26-29 December, 2016, 23-25 January, 2017 and 14-16 June, 2017 and 25-27 July, 2018. The proposal was also considered by the EAC (Violation) in its meetings held on 17-18 May, 2018 and 13 -14 June, 2018 in the Ministry and referred the matter to EAC (Industry-2).

The EAC (Industry-2) in its meeting held on 25-27 July, 2018, after deliberations, deferred the proposal and asked for additional information/inputs and clarifications on the following:-

(i) Revised product list with the complete details viz, product name, capacity, CAS no, LD_{50}.
(ii) Categorization of products under different items vis-a-vis the Schedule of the EIA Notification, 2006.
(iii) Revised water balance along with effluent treatment plan. Fresh water requirement to be rationalized/minimized with more recycling of treated effluents and limited to the worst case scenario of production.
(iv) Baseline data already exceeding the prescribed standards in respect of PM_{10}, and accordingly action plan to be submitted to control the emissions from the proposed project, in consultation with SPCB.
(v) Compliance status of the CRZ clearance for the pipeline in CRZ area, meant for discharging treated effluents to the estuary zone of river Par through diffusers.
(vii) NOC from SPCB for discharge of additional effluents.

42.3.7.3 In response to above observations of the EAC, para wise information submitted by the project proponent is as below:-

(a) Detailed product list along with categorization

Revised product list with complete product name, capacity, CAS no, LD_{50} and categorization of products under different items vis-a-vis the Schedule of the EIA Notification, 2006 has been uploaded and presented before the Committee.

(b) Revised water balance along with effluent treatment plan

- Total water requirement is 28358 m3/day of which fresh water requirement of 21950 m3/day will be met from Par River.

- Water requirement is given as below:

S. No.	Description	Water Requirement in KLD	
		Existing	After Proposed Expansion
A	Gardening	537	537
B	Domestic	400	402
C	Industrial		
1	Process	16376	17658
2	Cooling Tower	2735	4782
3	Washing	1351	1851
4	Boiler	1170	3128
	Total	22569	28358
	Recycled Water	0	3335
	Rain water harvesting	0	3073
	Fresh Water Requirement	22569	21950

- Total Effluent will be 24096 KL/Day. From that 19239 KL/Day effluent will be treated through ETP of 32 MLD. RO/MEE provide to treat 2851 KLD wastewater. 82 KLD will be going for incineration. 20514 KLD treated wastewater will be discharged to Par River through 4 km long pipeline.
- It is in advanced stages of finalizing ZLD unit for our West ETP for reducing the wastewater by 7500KLD which is expected to reduce fresh water intake by 6500-7000KLD.
- It is also actively considering use of STP water in manufacturing activities to reduce fresh water consumption substantially from the river for next 2-3 years.

- Wastewater generation is given as below:

S. No.	Description	Wastewater Generation in KLD	
		Existing	After Proposed Expansion
A	Gardening	0	
B	Domestic	320	322
C	Industrial		
1	Process		
a	For Incineration	23	82
b	To ETP	17283	17066
c	To RO/MEE	97	1000
2	Cooling Tower B/D	1944	
	Boiler B/D	805	
a	For Direct Disposal		1275

b	To MEE		2500
3	Washing	1305	1851
	Total Wastewater Generation	21657	24096
	Wastewater Going to ETP for Treatment	21657	19239
	Treated effluent for discharge	21657	20514

(c) Action plan to control the emissions from the proposed project

- High efficiency Electro Static Precipitators (ESPs) of 4 fields have been provided in our recently commissioned 22 MW CPP having concrete chimney of 106 m height where the SPM will be below 50 mg/NM^3
- In our existing CPP, upgrading of ESP is in progress by replacing existing single field ESP field transformers with three phase transformers for increase collection.
- Optimum air-fuel ratio (AFR) in the CPP is being ensured throughout operation period using lead-lag auto combustion control system through DCS system.
- In order to carry out efficient dispersion of gaseous pollutants, desired velocity of emission has been ensured through proper functioning of FD/ID fans.
- Provision for adequate process safety controls are provided and operated through DCS system.
- Coal / fuel is being transported in closed dumpers and stored in closed storage area.
- Water is being sprinkled through fountains in strategic location for dust suppression.
- Dust collection system, Magnetic separator and dust ventilation is being/will be provided to control of fugitive dust emissions during screening & coal crushing.
- Coal is being conveyed through closed conveyor belt with efficient dust extraction and suppression system.
- The ash is transferred directly from the ESP to storage silos (provided with bag filters) through a closed conveying system and controlled by PLC system. Fly ash suppression system provided all around the silo and at unloading point to the ash bulkers.
- All the internal roads of factory premises are either made of asphalt concrete or cement concrete to prevent dust during vehicular movement.
- Use of vehicles with PUC shall be made compulsory for transportation vehicles.
- Stacks of adequate height & internal diameter are provided for efficient dispersion of emission.
- Regular monitoring is done as per the Environmental Monitoring Plan for checking the efficiency of control equipment.
- Online monitoring system of latest design is provided with all the boiler stacks and connected with GPCB & CPCB servers.
- Additional greenbelt of 1420 m2 coverage around the recent CPP has been planted

(d) Compliance status of the CRZ clearance for the pipeline in CRZ area

Report from the Regional Office of the Ministry vide letter dated 24th April, 2017, on the status of the compliance of the conditions stipulated in the CRZ clearance dated17th January, 1998 to the project for the 4 km long treated discharge pipeline in Par estuary, District Valsad, has been submitted, which was found to be satisfactory.

(e) NOC from SPCB for discharge of additional effluents

Consent to establish (NOC) from Gujarat PCB has been obtained vide letter dated 17th July, 2016, mentioning effluent discharge through pipelines.

42.3.7.4 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of chemical manufacturing unit from 31,237.97 TPM to 38,008.92 TPM by M/s Atul Limited in a total land area of 12,05,401 sqm located at Plot No.5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91, Survey No. 274, 275, 276, Tehsil and District Valsad (Gujarat). The expansion includes increase in production capacity of Synthetic Organic Chemicals Industry [Dyes from 1,300.80 TPM to 1,884.13 (9 nos of products), Resin from 2,990.90 TPM to 3,432.57 TPM (7 nos of products), Other Chemicals from 20,551.60 TPM to 21,202.60 TPM (28 nos of products), Chlor-Alkali unit from 3,400 TPM to 7,500 TPM (2 nos of products), Pesticides Technical from 2,644.07 TPM to 2,905.71 TPM (24 nos of products). In addition, there shall be a new series of products namely, Flavors & Fragrances of 733.32 TPM (6 nos of products), whereas, production of bulk drugs & pharmaceuticals shall remain at 350.6 TPM (13 nos of products)].

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates'; 5(f) 'Synthetic organic chemicals industry' & 4(d) 'Chlor-alkali industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 3rd July 2015. Public hearing was conducted by the SPCB on 21st June 2016.

Total water requirement is estimated to be 28358 cum/day, of which fresh water requirement of 21950 cum/day will be met from Par River. Permission for withdrawal for 18184 KLD has been obtained from the Damanganga Canal Distributory, Government of Gujarat vide letter dated 14th September, 2017. To meet the additional requirement of water, proposal has been submitted to the concerned regulatory authority.

Total effluent generated from different industrial operations is estimated to be 24096 cum/day, which will be treated in ETP of capacity 32 MLD, 3335 cum/day will be recycled/reused in the process. 20514 cum/day treated wastewater will be discharged to estuary of Par River through the existing 4 km long pipeline.

The expenditure towards CER for the project would be 2% 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 the public hearing have been duly addressed by the project proponent. The additional information submitted by the project proponent found to be satisfactory, adequately addressing concerns raised by the Committee.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *The treated effluent of 3335 cum/day shall be recycled/reused to meet the requirement of different industrial operations, and the remaining treated effluent of 20514 cum/day shall be discharged to estuary of Par river through the existing pipeline.*

- *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.*
- *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.*
- *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.*
- *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.
- *Total fresh water requirement shall not exceed 21950 cum/day, proposed to be met from Par River. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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.*
- *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*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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, 1989.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *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.

- *The green belt of at least 5-10 m width 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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*

Agenda No.42.3.8

Manufacture of Melamine Formaldehyde Resin, Phenol Formaldehyde Resin and Urea Formaldehyde Resin and Laminate sheets at Survey No. 203/15, B/h. Shaktiman Rotawetar, N. H. Road, Village Bhunava, Taluka Gondal, District Rajkot (Gujarat) by M/s Swastik Laminates - For Environmental Clearance

[IA/GJ/IND2/64176/2017, IA-J-11011/207/2017-IA-II(I)]

42.3.8.1 The project proponent and the accredited consultant M/s T R Associates made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environment clearance to the project for Setting up Synthetic Organic Chemical manufacturing unit at Survey No.203/15, Plot No. 4, B/h. ShaktimanRotawetar, N.H. Road, Village: Bhunava, Taluka Gondal, District: Rajkot, Gujarat by M/s Swastik Laminates.

(ii) The project proposal was considered by the expert appraisal committee (Industry 2) in its 23rdEAC meeting held during 3to 5May, 2017 and recommended Terms of References (TORs) for the project. The TOR has been issued by Ministry vide letter no. J-11011/207/2017-IA.II (I) dated 30/05/2017.

(iii) All Synthetic Organic Chemicals Industry projects, located outside the notified industrial area/estate and not fall into small scale unit criteria are listed at S.N.5(f)of schedule of Environmental Impact Assessment (EIA) notification under Category 'A' and are appraised at Central level by the Expert Appraisal Committee (EAC).

(iv) Total 9,942 m^2 land area will be used for proposed project. Industry will develop greenbelt in an area of 32.39% i.e. 3220 m^2 out of 9942m^2 area of the project. Industry will develop 353 m^2area as a green belt outside the industrial premises adjacent to project boundary. So total 3573 m^2 (3220 m^2 + 353 m^2) area will be developed as Green belt.

(v) The estimated project cost is approx. Rs. 1.25 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 43.00Lakhsand the recurring cost(operation and maintenance) will be about Rs. 31.00Lakhsper annum.

(vi) Total employment will be 60persons as a direct. Industry proposes to allocate Rs. 2.5Lakhs@of 2.0% towards Corporate Environment Responsibility (CER) activities.

(vii) There are nonational Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild Life Corridors etc. within 10 km distance from the project site. JasukiRiveris flowing at a distance of3.25kmin ESE direction.

(viii) Ambient air quality monitoring wascarried out at 8locations during October – December 2016 & May 2017 to June,2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (60.81to 96.50µg/m^3), $PM_{2.5}$ (22.50 to 36.06µg/m^3), SO_2 (9.62to 25.00µg/m^3) NO_2(14.87to 30.68µg/m^3),CO (B.D.L.), VOC (BDL) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.22µg/m^3,0.62µg/m^3 and 3.26µg/m^3 with respect to PM_{10}, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards.

(ix) Total water requirement is 47.5m^3/day of which fresh water requirement of30.5m^3/day andwhich will be met from Borewell / Open well.

(x) Industrial effluent of 12.16m^3/day will be treated through Effluent Treatment Plant followed by Evaporator and the stated system will achieve Zero Liquid Discharge. Domestic effluent of 6.7 m^3/day will be treated in Sewage Treatment Plant. Treated sewage, 5.5 m^3/day will be reused in gardening & treated sewage, 1.2 m^3/day will be reused in domestic flushing.

(xi) Power requirement of proposed project will be 200 KVA and will be met from Paschim Gujarat Vij Company Limited (PGVCL).150 kVA D.G. Set will be used as standby during power failure. Stack height of 6 m) will be provided as per CPCB norms to the proposed D.G. set.

(xii) Briquettes/Coal fired 3 TPH Steam Boiler & 15 Lac Kcal/hr. Thermic Fluid Heater will be installed. Cyclone Separator followed by Bag Filter with a stack height of 30 m will be installed for controlling the Particulate Matter Emissions within statutory limit of 150mg/Nm^3 for the proposed boiler& TFH.

(xiii) Details of process emissions generation and its management are as under:

Sr. No.	Stack attached to	Stack Height (m)	Expected Pollutant	APCSystem	Quality of pollutant
1	Dryer	11	Methanol	Condenser	As per GPCB Norms

(xiv) Details of solid waste/hazardous waste generation and its management are as under:

Sr. No.	Description	Category	Quantity (MT/ Annum)	Mode of Disposal

1	ETP Sludge + Evaporation residue	35.3	42	Collection, storage and disposal at approved TSDF Site.
2	Edge cutting waste	23.1	9.6	Collection, storage and disposal at approved CHWIF for disposal
3	Spent Carbon	36.2	132	Collection, storage and disposal at approved CHWIF for disposal
4	Used / Spent Oil	5.1	0.048	Collection, storage and used within premises as a lubricant / sold to registered recycler.
5	Discarded bags/ drums/ containers	33.1	6.0	Collection, storage & sell to authorized vendor

(xv) Public hearing for the proposed project has been conducted by the State Pollution Control Boardon06/02/2018. There were no any issues raised during the Public Hearing. Only suggestion of social upliftment activities in surrounding area.

(xvi) Following are the list of proposed products.

S.No.	Name of Product	Capacity (TPM)
1.	Phenol Formaldehyde Resin	300
2.	Melamine Formaldehyde Resin	300
3.	Urea Formaldehyde Resin	400

42.3.8.2 The proposal was earlier considered by the EAC in its meeting held on 27-29 August, 2018. The Committee after deliberations observed that as per the consent to establish issued by the Gujarat Pollution Control Board vide letter dated 12th July, 2018, the unit is presently engaged in manufacturing resins of total capacity 300 TPM (Phenol Formaldehyde Resin - 100 TPM, Melamine Formaldehyde Resin - 100 TPM and Urea Formaldehyde Resin - 100 TPM). Accordingly, the present proposal should have been for expansion of resin manufacturing from 300 TPM to 1000 TPM. Further, as per one of the specific condition stipulated therein, the industry was to submit the CGWA certificate for dispensing of the water from the borewell within one month, which is still awaited and there was no satisfactory response in this regard.

42.3.8.3 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up resin manufacturing unit of capacity 1000 TPM (Phenol Formaldehyde Resin - 300 TPM, Melamine Formaldehyde Resin - 300 TPM and Urea Formaldehyde Resin - 400 TPM) by M/s Swastik Laminates in a total area of 9942 sqm located at Survey No. 203/15, Plot No. 4, B/h. Shaktiman Rotawetar, N.H. Road, Village Bhunava, Taluka Gondal, District Rajkot (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification under category 'A' and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry. The ToR for the project was granted on 30th May, 2017. Public hearing was conducted by the State Pollution Control Board on 6th February, 2018.

Total water requirement is estimated to be 47.5 cum/day, which includes fresh water of 30.5 cum/day to be met from the borewell/open well supply. Application for ground water withdrawal has been submitted to CGWA.

Effluent of 18.86 cum/day generated will be treated through Effluent Treatment Plant (having evaporator followed by condenser) followed by RO. Treated water of 17 cum/day will be recycled in the process and for green belt development, and thus the plant will conform to Zero Liquid discharge system.

42.3.8.4 *The EAC, after detailed deliberations, observed no change in the status from that reported during the last meeting on 27-29 August, 2018. The consent to establish dated 12th July, 2018 issued by the SPCB still shows present resin production of 300 TPM, whereas the present proposal is for setting up resin manufacturing unit of capacity 1000 TPM. The project proponent was asked to first get the same rectified. The proposal was, therefore, deferred for the needful.*

42.4 Any Other

Agenda No.42.4.1

Expansion of Agrochemicals, Intermediates and Polymers manufacturing unit by M/s Gujarat Insecticides Limited at Plot No.805/806, GIDC Estate, Ankleshwar, District – Bharuch (Gujarat) - For amendment in EC

[IA/GJ/IND2/61482/2017, IA-J-11011/3/2017-IA-II(I)]

The project proponent vide communication dated 26th October, 2018 has informed that they would like to drop the proposed amendment. In view of the same, the Committee recommended to reject the proposal.

Agenda No.42.4.2

Bulk Drug Unit at Survey Nos. 32,33,34,46,47,48 and its parts Mukteswarapuram Village, Jaggayyapet Mandal, Krishna District, Andhra Pradesh by M/s Vivin Laboratories Private Limited - For Extension of validity of EC

[IA/AP/IND2/78056/2011, J-11011/138/2010-IA.II (I)]

42.4.2.1 The proposal is for extension of the validity of the environmental clearance granted by the Ministry vide letter dated 2nd November, 2011 to the project for Bulk Drug Unit at Survey Nos.32-34,46,47,48 and its parts in Village Mukteswarapuram, Mandal Jaggayyapet, District Krishna (Andhra Pradesh) in favour of M/s Vivin Laboratories Private Limited.

42.4.2.2 The project proponent vide proposal dated 6th September, 2018 has informed that the proposed project was not implemented due to financial problems and now the implementation of the project is in active stage, and hence requested for extension of validity of the EC.

42.4.2.3 *The EAC, after detailed deliberations, recommended for extension of the validity of the environmental clearance dated 2nd November, 2011, for a period of three years i.e till 2nd November, 2021.*

Agenda No.42.4.3

Expansion of Active Pharmaceutical Ingredient (APIs) in Existing Unit at Survey No. 119, 120 & 121, At & Post Village Panelav, Tehsil Halol, District Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I) - For amendment in EC

[J-11011/232/2014-IAII (I), IA/GJ/IND2/30972/2014]

42.4.3.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 31stJanuary, 2017 to the project for expansion of Active Pharmaceutical Ingredient (APIs) manufacturing unit located at Survey No.119, 120 & 121, Village Panelav, Tehsil Halol, District Panchmahal (Gujarat) in favour of M/s Alembic Pharmaceuticals Limited (API Unit - I).

42.4.3.2 The project proponent has now requested for amendment in the EC with the details are as under;

Sr. No.	Matter as per EC Letter	Amendment Required	Justification
Subject	Expansion of Active Pharmaceutical Ingredient (APIs) in Existing Unit at Survey No.119, 120 & 121, At, Post & Village Panelav, Tehsil Halol, District Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I)	• Expansion of Active Pharmaceutical Ingredient (APIs) in Existing Unit at Survey No.84/P, 119, 120 & 121, At, Post & Village Panelav, Tehsil Halol, District Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I)	• Addition of new survey no. 84/P.
Sr. No. 2	The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for expansion of Active Pharmaceutical Ingredients (APIs) in existing unit at Survey No. 119, 120 & 121, At, Post & Village: Panelav, Tehsil: Halol, District: Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I). Total plot area is 68,530.26 m^2, of which green belt will be developed on 24,000 m^2 (i.e. 35% of the total area). Total cost of expansion project is Rs. 36.81 Crore. Out of this Rs. 4.32 Crore is earmarked for environment management system. A River Vishwamitri is flowing at a distance 3.2 km. Following products will be manufactured:	• The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for expansion of Active Pharmaceutical Ingredients (APIs) in existing unit at Survey No. **84/P**, 119, 120 & 121, At, Post & Village: Panelav, Tehsil: Halol, District Panchmahal, Gujarat by M/s Alembic Pharmaceuticals Limited (API Unit-I). **Total plot area is 77,091 m^2, of which green belt will be developed on 27,000 m^2 (i.e. 35% of the total area).** Total cost of expansion project is Rs. 36.81 Crore. Out of this Rs. 4.32 Crore is earmarked for environment management system. A River Vishwamitri is flowing at a distance 3.2 km. Following products will be manufactured:	• Addition of new survey no. 84/P.

Sr. No.	Matter as per EC Letter	Amendment Required	Justification
Sr. No. 3	Bag filter will be provided to agro waste/briquettes fired boiler to control particulate emissions. ESP will be provided to imported coal fired boiler. Quencher and alkali scrubber will be provided to incinerator. Scrubber will be provided to control process emissions viz. HCl, Cl_2& NH_3. Total water requirement will be increased from 195 m^3/day to 397.5 m^3/day. Out of which fresh water requirement from ground water source will be 160 m^3/day. Industrial effluent generation will be 245 m^3/day, which is proposed to be segregated into high COD/TDS and Low COD/TDS effluent stream. High COD effluent stream will be neutralized, treated through solvent stripper and multi effect evaporator and ATFD. Low COD/TDS effluent stream will be treated in ETP followed by RO and treated effluent from RO will be recycled/ reused for cooling tower makeup. No effluent will be discharged outside the plant premises. ETP sludge and sludge from scrubber will be sent to TSDF. Distillation residue and process waste will be sent to authorized recyclers / re-processors.	• Bag filter will be provided to agro waste/briquettes fired boiler to control particulate emissions. ESP will be provided to imported coal fired boiler. Quencher and alkali scrubber will be provided to incinerator. Scrubber will be provided to control process emissions viz. HCl, Cl_2& NH_3. **Total water requirement will be increased from 195 m^3/day to 555 m^3/day (Industrial: 485 m^3/day + Domestic: 70 m^3/day). Out of which 165 m^3/day will be recycled & fresh water requirement from ground water source will be 390 m^3/day.There is no change in waste water generation and treatment facility.** Industrial effluent generation will be 245 m^3/day, which is proposed to be segregated into high COD/TDS and Low COD/TDS effluent stream. High COD effluent stream will be neutralized, treated through solvent stripper and multi effect evaporator and ATFD. **In case in Shut down of MEE due to cleaning or Mechanical-Electrical fault, the industry shall transfer High COD to outside High COD treatment Zero Discharge (common MEE) facility of M/s. ACPTCL Ankleshwar.** Low COD/TDS effluent stream will be treated in ETP followed by RO and treated effluent from RO will be recycled/ reused for cooling tower makeup. No effluent will be discharged outside the plant premises. ETP sludge and sludge from scrubber will be sent to TSDF. Distillation residue	• Increasing in cooling tower make up requirement due to increase in day-to-day ambient temperature of the location which forces us to increase in numbers of cooling towers. Presently, we are having total 23 nos. cooling towers. Blow down will be restricted by adopting **SCALE-OFF** technology. • Boiler make-up water quantity was wrongly assumed during production capacity enhancement in last EC application. • Reduction in reuse of recycled water in utility because of: a. It deteriorates our utilities, b. Reduces life of utilities; and c. Increases cost of our products. • Increase in green belt area results in increase in fresh water requirement. • TDS level of ground water is

Sr. No.	Matter as per EC Letter	Amendment Required	Justification
		and process waste will be sent to authorized recyclers / re-processors. **The domestic waste water was earlier treated along with industrial waste water in ETP; now, it will be treated in compact STPs having MBBR technology. Treated sewage will be used for gardening.**	also being increased, which forced to increase withdrawal of fresh water. • To sustain Business, it is important to run the system by 24 hrs. GPCB has agreed for this and asking permission from MoEF&CC. Trial Base permission was given by GPCB **(Annexure-XII of Form-1).** • Domestic water requirement increases due to addition of Quality Control (QC), Quality Assurance (QA), Administration and Human Resource (HR) departments which were earlier centralized at our Vadodara Head Office.
A. Specific Conditions Sub Condition no. iv	Total fresh water requirement from ground water source shall not exceed 160 m^3/day and prior permission shall be obtained from the CGWA/SGWA	• Total fresh water requirement from ground water source shall not exceed **390 m^3/day** and prior permission shall be obtained from the CGWA/SGWA	
A. Specific Conditions Sub Condition no. xiv	As proposed, green belt of 24,000 m^2 shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downwind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO	• As proposed, green belt of **27,000 m^2** shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downwind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO	• Addition of new survey no. 84/P.

42.4.3.3 *During deliberations, the EAC noted that due to addition of Sy. No.84/P, the plot area shall be increased by 8561 sqm, for which public hearing has not been conducted by the SPCB. Further, there would be substantial increase in fresh water requirement from 160 cum/day to 390 cum/day, which is proposed to be sourced through ground water.*

The Committee, after detailed deliberations, desired for comments of the SPCB regarding expansion of such industries in non-industrial area by continuously adding plots, and the requirement of public hearing to consider the grievances of local affected people in such cases. In case of increased water requirement, the Committee asked the project proponent to get approval from the CGWA for total ground water withdrawal of 390 cum/day.

The proposal was, therefore, deferred for the needful.

Agenda No.42.4.4

Modernization/Expansion of bulk drugs and intermediates manufacturing unit at Sy. No. 240/B, Village Dothigudem, Mandal Pochampally, District Nalgonda (Telangana) by M/s V J Sai Chem - For amendment in EC

[IA/TG/IND2/58825/2013, J-11011/67/2014-IA.II(I)]

42.4.4.1 The proposal is for amendment in the environmental clearance (EC) granted by the Ministry vide letter dated 7th March, 2017 to the project for "Expansion of Bulk Drug (APIs) and Intermediates Manufacturing Unit at Sy. Nos.: 240/B, Dothigudem (V), Bhoodan Pochampally (M), Yadadri Bhuvanagiri District (formerly Nalgonda District), Telangana State" in favour of M/sV J Sai Chem.

42.4.4.2 The project proponent has requested for amendment in the EC with the details are as under:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised read as	Justification / reasons
1.	Page No. 2 Point No. 7: Line 1st	Thequantity of effluents generated is 24.09 KLD after expansion. These effluents will be senttoeffluenttreatmentsyste m basedonZero liquid discharge principle. These effluents will be segregated as low TDS and high TDS stream. Thetreatment system for treating High TDS / COD effluentsconsistsof Equalization, Neutralization, Settling tank, Stripper, Multiple EffectEvaporator(MEE) followed by Agitated Thin film dryer (ATFD).	The quantity of effluents generated is 24.09 KLD after expansion. The effluent shall be segregated into High TDS / COD and Low TDS / COD streams and collected by gravity into collection tanks separately. Segregated Pre-treated effluent will be sent to CETP–ZLD of IEISL, Fab City for further treatment based on Zero Liquid Discharge principle and get back the 90% of treated effluent from	TSPCB has issued common directions to about 10 industries to obtain membership with new CETP-ZLD of IEISL established with a purpose to support the small scale industries in and around Nalgonda district, instead of installing a ZLD within the premises. Also suggested the industry to get the EC amendment

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised read as	Justification / reasons
		Thecondensate from stripperissenttocementplants for co-incineration, while the condensatefromMEEandATFD is mixed with Low TDS/COD effluentstobetreatedinBiological system.Thesalts fromATFDare sentto TSDFfordisposal.The stripper distillate, processresidue and solventresidue are sentto cementplants forco-incineration based on acceptability. The evaporationsaltsandETP sludge aresent toTSDF.	CETP-ZLD for reuse in Cooling towers and Boiler. Pretreatment consists of Equalization, Neutralization and Settling (Clarifier) for HTDS and LTDS effluent separately.	from MoEF&CC for change in point of effluent disposal to CETP-ZLD vide letter No. TSPCB/ NLG/HO/CFO/2018-4274 dated 21-03-2018
2.	Page No. 4 Specific Condition: Point No. vi	Waste water will be segregated intoHigh TDS/CODandLow TDS/COD effluentstreams. High TDSeffluentstreamwillbesentto Multiple effectevaporator(MEE) followed byAgitated thin filmdryer (ATFD).Low TDSeffluentstream willbetreated inbiological treatmentunitfollowedby RO.RO rejectwill be sentto MEE and permeatewill be reusedincooling towers/boilers makeup. Domestic waste water shall be sent to septic tank followed by soakpit.	Waste water will be segregated intoHigh TDS/ COD and Low TDS/ COD effluent collected by gravity into collectiontanksseparately. Segregated pre-treated effluent willbesentto CETP–ZLD ofIEISL, Fab Cityfor further treatment. The 90% of treated effluent get back to the industry from CETP-ZLD for reuse in Cooling towers and Boiler.	
3.	Page No. 5 Specific Condition: Point No. xvii	Zero Liquid discharge shall be implemented.	Pre-treated HTDS & LTDS effluent will be sent to CETP – ZLD of IEISL Fabcity separately.	

42.4.4.3 *The EAC, after detailed deliberations, took serious note on the justification provided by the project proponent without any proper documents. The Committee further noted that bulk drugs and pharmaceutical industries are identified as critically polluting industries by the Ministry/CPCB, and are also directed to achieve Zero Liquid Discharge by the CPCB/SPCB's.*

The Committee found the proposal not worth for the proposed amendment, and thus not recommended.

Day Two- 30th October, 2018

42.5 Environmental Clearance

Agenda No.42.5.1

Expansion of molasses based distillery from 35 KLPD to 65 KLPD by M/s Brima Sagar Maharashtra Distilleries Ltd at Shreepur, Taluka Malshiras, District Solapur (Maharashtra) - For Environmental Clearance

[IA/MH/IND2/67191/2017, J-11011/192/2017-IA-II (I)]

42.5.1.1 The project proponent and the accredited Consultant M/s Dr Subbarao's Environment Center made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project Expansion of existing molasses based distillery from 35 KLPD to 65 KLPD by M/s Brima Sagar Maharashtra Distilleries Ltd at Shreepur, Taluk Malshiras, District Solapur (Maharashtra).

(i) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 13th meeting held during 19th November, 2013 and recommended Terms of References (ToR) for the Project. The ToR has been issued by Ministry vide letter No.J-11011/249/2013-IA.II(I) dated 31st January, 2014.

(ii) The project proponent applied for amendments in ToRs which were approved, vide F.No.J-11011/249/2013-IA.II(I) dated 8th May, 2015.

(iii) The project proponent submitted the EIA report for Environmental Clearance which was considered by the Expert Appraisal Committee (Industry-2) in its 24th meeting held during 14th to 16th June, 2017. The EAC did not approve the EIA Report as it was not submitted within the stipulated period of 3 years after the grant of the ToRs. The Committee recommended the Standard ToRs for preparation of EIA Report, and the additional ToRs were given as:

- Fresh baseline Data to be Submitted
- Public Hearing is exempted under the provision as per Para 7(ii) of the EIA Notification 2006

(iv) All molasses based distillery projects are listed at S.N. 5(g) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(v) Ministry had issued EC earlier vide letter No. J-11011/68/2002-IA.II; dated 14th May, 2003 for Distillery unit in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd, the name of which changed to M/s Brima Sagar Maharashtra Distilleries Ltd. Existing land area is 30.60 ha and no additional land would be required for proposed expansion. Industry has already developed greenbelt in an area of 33% i.e. 10 ha out of total area of the project.

(vi) The estimated project cost is Rs.48 crores including existing investment of Rs.6 crore. Total capital cost earmarked for pollution control measures is Rs.9.46 crore and the recurring cost (operation and maintenance) will be about Rs.0.722 crore per annum. Total Employment

will be 200 persons as direct & 200 persons indirect after expansion.

(vii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Bhima river is flowing at 5 km in NE direction.

(viii) Ambient air quality monitoring was carried out at 8 locations during 1st March, 2014 to 31st May 2014 and 16th Sept 2017 to 15th Dec 2017. The baseline data indicates the ranges of concentrations during 1st March 2014 to 31st May 2014 as PM_{10} (34.87 to 70.35 µg/m^3), $PM_{2.5}$ (20.1-46.12 µg/m^3), SO_2 (10.21-34.21 µg/m^3) and NO_2 (18.22-52.94 µg/m^3). And during 16th Sept 2017 to 15th Dec 2017 the baseline data indicates the ranges of concentrations of: (PM_{10} (32.07-59.27 µg/m^3), $PM_{2.5}$ (17.71-36.64 µg/m^3), SO_2 (21.62-42.12 µg/m^3) and NO_2 (18.75-31.58 µg/m^3). AAQ modeling study for point source and Line Source emissions indicates that the maximum incremental GLCs after the proposed project would be 60.09 µg/m^3, 49.57 µg/m^3 and 40.14 µg/m^3 with respect to PM_{10}, SO_X and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) Total water requirement is 1193 m^3/day of which fresh water requirement of 417 m^3/day will be met from Nira right bank canal. Effluent of 260 m^3/d quantity will be treated through Bio-methanation followed by RO and Composting and will achieve Zero Liquid discharge.Domestic waste water will be treated in STP of capacity 25m3/day.

(x) Power requirement after expansion will be 0.90 MW including existing 0.5 MW and will be met from its own cogeneration plant based on Bio-gas with H2S Scrubber. Additionally 2 Nos of 380 KVA DG sets are used as standby during power failure. Stack height of 6.5 meters was provided as per CPCB norms to the proposed DG sets. DG sets of additional numbers will be require as standby during power failure.

(xi) Existing unit has 10 TPH and 4 TPH Bio gas/ Coal/ pet coke/ bagasse fired boilers which were already in existence Multi cyclone separators with a stack of height of 35 m were installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the existing 10 TPH and 4 TPH Boilers. No additional Boilers are required.

(xii) Process emissions are particulate matter and H2S in Biogas. Multicyclone and H2S Scrubber are provided as APC equipment.

(xiii) Solid waste generated are digested sludge from anaerobic digester and yeast sludge from fermentation tanks which are around 100 MT/Month and composted along with spentwash.

(xiv) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 2nd December, 2016. The one participant of the Public Hearing raised the issue related to pollution due to spentwash and asked what actions has been taken by the MPCB for discharging Spent wash outside the factory. He has further suggested that spent wash should not be discharged into the river or nalla. All the remaining participants approved the proposed expansion of the Distillery capacity. Some participants told that factory is supplying drinking water due to scarcity of water in this region. However, they wanted RO water may be supplied for drinking purpose.

(xv) Approved the Compliance of Environmental Clearance conditions for the existing 35 KLPD and suggested to increase the number of monitoring stations and regular submission of Six Monthly Report which were compiled by the industry.

(xvi) The details of products and capacity as under: MT/ annum

S. No	Product	Existing Quantity	Proposed Quantity	Total Quantity
1	Rectified Spirit	7560	6480	14040
2	ENA	2400	11000	13400
3	Malt Spirit	312	888	1200
4	Grape Spirit	600	600	1200
5	Potable Liquor	4000	5940	9940

42.5.1.2 The proposal was last considered by the EAC in its meeting held on 25-27 July, 2018, wherein the EAC asked for additional information/inputs and clarifications in respect of the following:

- Production during FY 2015-16 is 42.46 KLPD i.e. higher than the sanctioned capacity of 35 KLPD, which amounts to non-compliance of the existing EC conditions,
- The earlier EC dated 14th May, 2003 was issued in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd, and should have been transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd.
- Proposed fresh water requirement of 610 cum/day would be reduced to 455 cum/day. The water balance needs to be revised accordingly.
- STP to be installed for the treatment of domestic effluent.
- Plan for Corporate Environment Responsibility (CER) and the traffic management to be submitted.
- Fresh surface and ground water analysis, VOC and HC in the study area.
- Redressal of the issues raised during the public hearing.

42.5.1.3 Para wise replies submitted by the project proponent in response to the above observations, are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1.	Production during FY 2015-16 is 42.46 KLPD i.e. higher than the sanctioned capacity of 35 KLPD, which amounts to non-compliance of the existing EC conditions,	During the Financial Year 2015-16, the fermentable sugar content in the Molasses was high, and as such the yield of the Rectified Spirit per tonne of the Molasses was 280 liters/tone of molasses, compared to the Normal Yield of the Rectified Spirit, i.e. 260 to 265 Liters/tone of molasses. The alcohol content in the fermented wash was observed to be around 8 percent, which was greater than normal values of the alcohol content in the fermented wash i.e around 7%. The influence of the above two factors has resulted in the slightly higher Rectified Spirit production. However, the effluent quantity i.e. Spentwash generated from the fermentation process was around 8 to 8.5 liters/liter of Rectified Spirit Production. Which is less, as the Normal value of spent wash generated is about 10 liters/liter of Rectified Spirit Production. Thus, the Organic Loading on the ETP unit

		remained unaltered and there was no shock loading on the performance of the ETP. In the view of above facts, we request you to waive the Penal Action against the industry, having produced marginally higher production than the Environmental Clearance Conditions.
2.	The earlier EC dated 14th May, 2003 was issued in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd, and should have been transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd.	The Brima Sagar Maharashtra Distilleries Limited, has applied for transfer/Change of the name, and accordingly, the TORs were issued in the name of M/s Brima Sagar Maharashtra Distilleries Limited. However, as directed by the Expert Appraisal Committee, we had once again applied online for the change in the name of the Industry for Environmental Clearance with necessary documents, immediately after the Expert Appraisal Committee Meeting, on 27th July, 2018.
3.	Proposed fresh water requirement of 610 cum/day would be reduced to 455 cum/day. The water balance needs to be revised accordingly.	PP has submitted the revised water balance. The total water requirement is 1193 cum/day, out of which fresh water intake of 417 cum/day is being met from Nira right bank canal.
4.	STP to be installed for the treatment of domestic effluent.	STP of capacity 25 cum/day shall be installed
5.	Plan for Corporate Environment Responsibility (CER) and the traffic management to be submitted.	PP has submitted the *Plan for Corporate Environment Responsibility (CER) and the traffic management.*
6.	Fresh surface and ground water analysis, VOC and HC in the study area.	PP has submitted the fresh baseline study for surface water, ground water, VOC and HC.
7.	Redressal of the issues raised during the public hearing.	PP informed that all the participants supported the proposed expansion of the Distillery Capacity from 35 KLPD to 65 KLPD except one Mr. Nitin Waghmare, who raised the issue that spent wash is disposed on the land through tankers and made the land infertile. However, many other participants did not support the observations of Mr. Nitin Waghmare. Another Participant Mr.Kalyan Landage, requested the management to supply RO drinking water, for which the Management have agreed.

42.5.1.4 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 35 KLPD to 65 KLPD by M/s Brima Sagar Maharashtra Distilleries Ltd in a total area of 30.60 ha at Shreepur, Taluk Malshiras, District Solapur (Maharashtra).

The project/activity is covered under category A of item 5 (g)(i) 'All Molasses based distilleries' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry

ToR for the project was earlier granted on 31st January, 2014, followed by amendment on 8th May, 2015. Public hearing was conducted by the SPCB on 2nd December, 2016. Fresh ToR was issued on 31st July, 2017.

Present total water requirement is 1193 cum/day, out of which fresh water intake of 417 cum/day is being met from Nira right bank canal.

Spent wash of 260 cum/day (4 KL/KL of Alcohol) will be generated and treated by bio-methanation followed by RO and bio-composting. 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 the public hearing have been duly addressed by the project proponent.

Ministry had earlier issued EC vide letter dated 14th May, 2003 for existing distillery unit in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd. The monitoring report on compliance status of EC conditions forwarded by the Regional Office vide their letter dated 10th August, 2016, was found to be satisfactory.

42.5.1.5 *The EAC, after deliberations and taking note of its earlier observations in its meeting held on 25-27 July, 2018, insisted for inputs and clarifications in respect of the following:-*

- *The earlier EC dated 14th May, 2003 issued in favour of M/s Brihan Maharashtra Sugar Syndicate Ltd has not been transferred in the name of M/s Brima Sagar Maharashtra Distilleries Ltd due to submission of the proposal only on 9th October, 2018. As such, admissibility of the proposal is yet to be established.*
- *For the alcohol production of 42.46 KLPD during FY 2015-16 i.e. higher than the sanctioned capacity of 35 KLPD, amounting to non-compliance of the existing EC conditions, the reply submitted by the project proponent was not found convincing and needs to be looked into by the Ministry for appropriate action.*
- *Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations.*

The proposal was deferred for want of needful on the above lines.

Agenda No.42.5.2

Manufacturing of Organic chemicals by M/s Arvee Laboratories (India) Pvt Ltd at Survey No.316, Navagam (Kardej), Bhavnagar-Sihor Road, Taluka & District Bhavnagar (Gujarat) - For reconsideration of Environmental Clearance

[IA/GJ/IND2/61830/2017, J-11011/26/2017-IA-II(I)]

42.5.2.1 The project proponent and the accredited Consultant M/s San Envirotech Pvt Ltd, Ahmedabad has made detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance for expansion of existing capacity of Isophthalic Acid derivatives and Thiopene Derivatives with addition of new products from 85.0 MT/month to 500.0 MT/month at Survey No. 316, Navagam (Kardej), Bhavnagar-Sihor road, Tal & District: Bhavnagar, Gujarat by M/s. Arvee Laboratories Pvt. Ltd. Total by-product recovery will be 861.66 MT/month.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry 2) in its 22nd meeting held during 17-18 April, 2017 and recommended Terms of References (ToR) for the Project. The ToR has been issued by Ministry vide letter No. J-11011/26/2017-IA-II (I) dated 30.05.2017.

(iii) All Synthetic Organic Chemicals Industries located outside the notified industrial area/estate are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Existing land area is 7183 m^2, Proposed expansion will be carried out in the existing premises. Thus, total land area after expansion will remain same i.e. 7183 m^2. Industry has already developed Greenbelt in an area of 450 m^2 out of 7183 m^2 of project area. After expansion unit will increasing the greenbelt area up to 2370 m^2 which will be 33% of the total area.

(v) The estimated project cost after proposed expansion will be Rs.70 crore including existing investment of Rs.20 crore. Total capital cost earmarked for pollution control measures will be Rs.9 crore and the Recurring cost (operation and maintenance) will be about Rs.2.5 crore per annum. Total employment including direct and indirect after expansion will be 280 persons.

(vi) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within the 10 km of the project site.

(vii) Ambient air quality monitoring was carried out at 8 locations during March, 2017 to May, 2017 and submitted baseline data indicates that ranges of concentrations of PM_{10} (59.7-67.1 µg/m^3), $PM_{2.5}$ (28.3-33.6 µg/m^3), SO_2 (11.6-14.7 µg/m^3) and NOx (13.7-18.7 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs from the proposed project would be 0.190 µg/m^3, 0.123 µg/m^3, 0.067 µg/m^3, 0.027 µg/m^3, 0.027 µg/m^3, with respect to SPM, SO_2, NOx, HCl, and HBr. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(viii) Total water requirement is 151.5 m^3/day of which fresh water requirement is 54.5 m^3/day and 97.0 m^3/day will be recycled/treated water, which will be met from Bore well water/ surface water from Gujarat Water Infrastructure Ltd.

(ix) Total effluent generation will be tune around 106.0 KLD; out of which 22 KLD of domestic wastewater which will be treated in STP and reused in gardening purpose. Industrial effluent will be 84 KLD, which will be treated in ETP, later passed through MEE, condensate of MEE will be reused in the plant. Thus, it will achieve zero liquid discharge.

(x) Power requirement 1500 kVA will be met from PGVCL. Unit will install stand by D.G set of (500 kVA), which will be used only in case of emergency/power failure from the grid. Stack (height 11 meters) will be provided as per CPCB norms to the proposed DG set.

(xi) Existing unit has one boiler of 5 TPH and Thermic Fluid Heater (2.0 lakhs kcal/hr.). After expansion unit has proposed one Thermic Fluid Heater (4.0 Lac Kcal./hr.). Coal/ Briquettes and LDO are used as fuel in Boiler and TFH respectively, after proposed expansion Coal/Briquettes with the quantity of 3 MT/day will be used as fuel in TFH. Boiler & TFH is connected with stacks of adequate stack height of 31 m & 21 m respectively.

(xii) Existing Process emission is from vents attached to scrubber of Sulphonation vessel for which Alkali Scrubber is used as APCM which will be dismantled after expansion. Proposed process emissions generation is from process reactor- 1, 2 & 3. Water scrubber followed by alkali scrubber will be used as an APCM for process reactor-1, whereas alkali scrubbers will be used as an APCM for process reactor-2 & 3.

(xiii) Details of Solid waste/Hazardous waste generation and its management.

S. No.	Type of Solid Waste	As per HWM Rules, 2016	Quantity Total After Expansion	Disposal method
1	ETP Sludge & MEE salt	35.3	50 + 25 = 75 MT/month	Collection, storage & disposal at TSDF site approved by GPCB.
2	Discarded containers/ drums/liners	33.1	2500 nos./year	Collection, storage and disposal by selling to approved recycler or traders.
3	Used lubricating Oil	5.1	500 lit/year	Collection, storage & use within premises as lubricant/sell to registered recycler.
4	Spent Carbon	28.3	1.1 MT/year	Collection, Storage, Transportation, Disposal at TSDF.
5	Spent Catalyst	28.2	1.2 MT/month	Collection, Storage, Transportation and sent back to supplier/ manufacturer for regeneration.
6	Spent Sulfuric Acid	29.6	740 MT/month	Collection, Storage, Transportation and sold to actual users.
7	Hydrochloric acid (25%)	26.3	4.16 MT/month	Collection, Storage, Transportation and sold to actual users.
8	Aluminum Chloride (20%)	26.3	34 MT/month	Collection, Storage, Transportation and sold to actual users.
9	Hydrogen Bromide (20%)	--	28 MT/month	Collection, Storage, Transportation and sold to actual users.

(xiv) Public Hearing for proposed expansion project has been conducted by the State Pollution Control Board on 23.03.2018.

(xv) Following is the list of existing & proposed products:

S. No	IUPAC Name	Quantity (MTPA)		
		Existing	Proposed	Total

Isophthalic Acid Derivatives				
1.	Dimethyl 5- Sodiosulfo Isophthalate	30	325	390
2.	5-Sodiosulfo Isophthalic Acid (Na-SIPA)	20		
3.	5-Lithosulfo Isophthalic Acid (Li-SIPA)	00		
4.	5-Hydroxy Isophthalic Acid (5-HIPA)	05		
5.	5-Sodio Sulpho-bis-(B-Hydroxy Ethyl) Isophthalate (Na-SIPHE)	00		
6.	5-Nitro Isophthalic Acid (5-NIPA)	00		
7.	Dimethyl 5-Nitro Isophthalate (DM 5-NIPA)	00		
8.	Mono Methyl 5-Nitroisophthalic Acid (MM 5-NIPA)	05		
9.	5-Amino Isophthalic Acid (5-AIPA)	05		
10.	Dimethyl 5-Amino Isophthalic Acid (DM-5-AIPA)	00		
11.	5-Amino Tri Iodo Isophthalic Acid (ATIPA)	00		
12.	5-Amino Tri Iodo Dichloride	00		
13.	5-Lithio Sulpho-bis-(B-Hydroxy ethyl) Isophthalate (Li-SIPHE)	00		
14.	5-Amino N-N-Bis (2-3 Dihydroxy Propyl) Isophthalamide HCl (ABA-HCl)	00		
15.	5-Amino N-N-Bis (2-3 Dihydroxy Propyl) 2,4,6 Trilodo Isophthalamide (ABATRIIODO)	00		
16.	5-Acetylamino N-N-Bis(2-3 Dihydroxy Propyl) 2,4,6 Trilodo Isophthalamide (ACETRIIODO)	00		
Benzoic Acid Derivatives				
17.	3,5 Di Nitro Benzoic Acid (DNBA)	00	65	65
18.	3,5 Di Amino Benzoic Acid (DABA)	00		
19.	2-Chloro 5-Nitro Benzoic Acid	00		
20.	4-Chloro 3,5 Di Nitro Benzoic Acid (4Cl DNBA)	00		
21.	4-Chloro 3,5 Di Amino Benzoic Acid (4Cl DABA)	00		
22.	4-Chloro 3,5 Di Amino Benzoic Acid Isobutyl Ester (4Cl DABA)	00		
23.	3 Sulpho Benzoic Acid Sodium Salt	00		
Thiopene Derivatives				
24.	Thiopene 2-Aldehyde	05	10	30
25.	Thiopene 2-Acetyl	05		
26.	Thiopene 2-Methanol	05		
27.	Thiopene 2-Carbo Oxalyic Acid	05		
28.	**4-Amino Pyridine (4AP)**	00	05	05
29.	**Bromo benzene**	00	10	10
	Total	**85**	**415**	**500**

List of By-Products

S. No.	By Products	Quantity (MTPA)		
		Existing	Proposed	Total
1	Sodium nitrate solution	00	22	22
2	Hydrochloric Acid 25%	00	4.16	4.16
3	Aluminium chloride solution	00	34	34
4	Sulfuric Acid (50 to 70%)	70	670	740
5	HBr solution	00	28	28
6	Sodium Bisulphate Solution	00	8.5	8.5
7	Acetic Acid	00	19.0	19.0
8	IBA	00	6.0	6.0
Total		**70**	**791.66**	**861.66**

42.5.2.2 The proposal was last considered by the EAC in its meeting held on 25-27 July, 2018, wherein the EAC insisted for firm commitment of the regulatory authority (M/s Gujarat Water Infrastructure Ltd) to meet the fresh water requirement of 54.5 cum/day after the proposed expansion. The Committee also asked for the Plan towards Corporate Environment Responsibility (CER), traffic management and redressal of the issues raised during the public hearing and the firm commitment.

42.5.2.3 In response to the above observations, parawise replies submitted by the project proponent are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1	Firm commitment of the regulatory authority (M/s. Gujarat Water Infrastructure Ltd.) to meet the fresh water requirement of 54.5 cum/day after the proposed expansion.	Letter from M/s Gujarat Water Infrastructure Ltd for supply of required water has been submitted.
2	Plan towards Corporate Environment Responsibility (CER).	The plan towards Corporate Environment Responsibility (CER) is as under:

Budgetary Provisions for the Social Upliftment

Sr. No.	Activity	Budgetary provision as per OM of CER (1% of expansion cost) (Rs. in Lakhs)	Budgetary provision As per the ToR & EIA report (5% of expansion cost) (Rs. in Lakhs)
1	Educational activities	10.0	50.0
2	Drinking water and sanitation facilities	18.0	90.0
3	Public Health and family welfare	18.0	90.0
4	Women Empowerment & children Development activities	12.0	60.0
5	Miscellaneous as per the demand of surrounding villages	12.0	60.0
	Total	**70**	**350.0**

3	Traffic management	Additional traffic from the project will be estimated 30 PCU/day [10 trucks/tankers (in & out) x 3] and 25 PCU/day from car and motorcycle, which have insignificant impact on existing traffic load. The road from Bhavnagar to Rajkot is four track roads, all types of vehicles move on the road. Capacity of road as per IRC = 2900 PCU's/hr. Total Volume during Peak Hours = 954 Existing Volume/Capacity ratio = 954/2900 = 0.329 The level of service is "B" that is very Good
4	Redressal of the issues raised during the public hearing and the firm commitment.	The issues raised during the public hearing and the firm commitment is as under:

Statement of issues raised by the public and response of the project proponent with action plan is as follows:

Sr. No.	Question/ Issue/ Suggestion	Response by project proponent	Time Bound Action Plan proposed	Budgetary provision
1	We demand only employment of	At present out of 80 workers of our company, 65 workers	Already in action	--

		local residents with parallel growth ofthe company.	are local residents and in future, we will employ more local residents based on their eligibility.		
	2	Please assure that surround villages get maximum facilities and benefits. Also assure that clerks, employees and security staff can get benefits.	Agreed and will be complied.	Local employment point is already in action Maximum facilities in terms of infrastructure, sanitation drinking water etc. will be provided within three years.	50.0 Lakhs
	3	As this company is situated in our village, and they have already helped us a lot, we further request to give maximum employment to residents of our village.	At present out of 80 workers of our company, 65 workers are local residents and in future, we will employ more local residents based on their eligibility.	Already in action	--
	4	How many workers will get employment in your company?	After expansion, total manpower will be 280; i.e. existing 80 nos. and proposed 200 nos. which include manpower at all levels.	Committed to get maximum local employees and not less than 80%.	--
	5	What are the safety facilities provided to workers who will be employed from our village?	PPEs like safety belts, gum boots, hand gloves, goggles etc. are provided to workers in the company.Provide safety training periodically.	Safety facility and training is part of action plan.	15 Lakhs/Year

42.5.2.4 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of synthetic organic chemicals manufacturing from 85 TPM (Isophthalic Acid derivatives and Thiopene Derivatives) to 500 TPM by M/s Arvee Laboratories Pvt Ltd in a total area of 7183 sqm at Survey No. 316, Navagam (Kardej), Bhavnagar-Sihor road, Taluka & District Bhavnagar (Gujarat).

The project/activity is covered under category A of item 5 (f) 'Synthetic Organic Chemical Industry' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry

The ToR for the project was granted on 30th May, 2017. Public hearing was conducted by the SPCB on 23rd March, 2018.

Total water requirement is estimated to be 151.5 cum/day, out of which fresh water intake of 54.5 cum/day proposed to be met from met from surface water from Gujarat Water Infrastructure Ltd.

Effluent of 106 cum/day will be generated; out of which 22 KLD of domestic wastewater which will be treated in STP and reused in gardening purpose. Industrial effluent will be 84 KLD, which will be treated in ETP, later passed through MEE, condensate of MEE will be reused in the plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The unit is reported to have been established in the year 2005 i.e. prior to the EIA Notification, 2006 came into force, and thus no requirement of the prior EC for the existing operations. Accordingly, no rationale for compliance status of the existing EC conditions.

Consent to Operate for the present capacity of 85 TPM has been obtained from the State PCB vide letter dated 22nd December, 2014, which is presently valid up to 3rd November, 2019.

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. The additional information submitted by the project proponent in reply to the observations of the EAC was found to be satisfactory and addressing its concerns in letter and spirit.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *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.*
- *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 54.5 cum/day to be met from Gujarat Water Infrastructure Ltd. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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.*
- *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*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *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 other processes.*
  (iii) *Use of automated filling to minimize spillage.*
  (iv) *Use of Close Feed system into batch reactors.*
  (v) *Venting equipment through vapour recovery system.*
  (vi) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*
- *The green belt of at least 5-10 m width 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.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.

Agenda No.42.5.3

Expansion of Liquid Storage Terminal at Plot No.A1, A2, A3, South End, Willingdon Island, Kochi (Kerala) by M/s Ganesh Benzoplast Limited - For reconsideration Environmental Clearance

[IA/KL/IND2/75387/2017, 1169/EC/SEIAA/KL/2017]

42.5.3.1 The project proponent and the accredited Consultant M/s ULTRA-TECH Environmental Consultancy and Laboratory made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project expansion of isolated storage terminal with additional 4 Aboveground storage tanks of combined capacity 18000 m^3 for Petroleum Products of Class A, B and C, Petrochemicals, and other non-classified liquids' at Plot no. A1, A2, A3, South End, Willingdon Island, Kochi, Keralaby M/s. Ganesh Benzoplast Limited.

(ii) The project proposal was considered by the State Expert Appraisal Committee (Kerala) in its 84th meeting held on 23rd January 2018 and recommended Terms of References (ToRs) (Standard Terms of Reference) for the Project. The ToR has been issued by SEAC Kerala vide minutes of 84th meeting, as item No. 84.15 dated 23rd January 2018.

(iii) All projects involving the "Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules1989 amended2000) are listed at S.N. 6 (b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'In absence of State Expert Appraisal Committee, Kerala, case will be appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) It has been reported that the Consent to Operate from the Kerala State Pollution Control Board obtained (No R17ERRCTO6133429) dated 4/7/2018 and consent is valid up to 30/06/2023 for the existing facility. For the proposed expansion, Consent to establish from the Kerala State Pollution Control Board obtained (NoR17ERRCVO6133429)dated 20/03/2018 and consent is valid up to 29.10.2020.

(v) The existing liquid storage terminal was established in the period 1999-2000 prior to EIA notification 2006. Existing land area is 14000 m^2. N*o* additional land will be acquired for proposed expansion as the proposed expansion will be within the existing land area.

(vi) Industry has already developed a green belt of 974 m^2(7% of the total plot area)at the project site. The project site is in Cochin Port Trust area. Cochin Port has already developed and is maintaining 33% of its total area as greenbelt.

(vii) The estimated project cost is Rs.1.5 Crores including existing investment of Rs.2.95 crores. Total capital cost earmarked towards environmental pollution control measures isRs9.2 lakhsand the Recurring cost (operation and maintenance) will be about Rs 1.8 Lakhs per annum.

(viii) Total Employment will be 15persons as direct &depending on the work load additional persons may be deployed by the Contractor after expansion.Industry proposes to allocate Rs 3.75 Lakhs @ of 2.5 % towards Corporate Social Responsibility.

(ix) There is one bird sanctuary (Mangalavanam Bird Sanctuary) at a distance of 5.8 km in North East direction and no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc within 10 km distance from the project site. Water body (Vembanad Lake) is at a distance of 75 m in South-West direction.

(x) Ambient air quality monitoring was carried out at 10 locations during 11th February 2017 to 29th April 2017and the baseline data indicates the ranges of concentrations as: PM_{10} (47-75µg/m^3),$PM_{2.5}$ (11-27µg/m^3), SO_2 (6-15µg/m^3) and NO_x (9-16µg/m^3). There is no manufacturing process at the project site as it is a liquid storage terminal. The proposed expansion involves additional 4 A/G tanks. There will not be any addition of stack. So, there will not be any addition of pollutants in air hence, modeling is not essential.

(xi) Total water requirement is 0.5 m^3/day (after the proposed expansion) of which fresh water requirement of 0.5 m^3/day will be met from Cochin Port Trust.

(xii) No industrial effluent will be generated at the project site. Sewage generated from domestic sources is treated in septic tank followed by soak pit. The rainwater collected from the tank farms flows through the Oil Water Separator (OWS) of total capacity20 m^3 and the OWS treated rainwater will be used for feeding the firewater storage tank. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 90 kW including existing 60 kW and willbe met from Cochin Port Trust (Kerala State Electricity Board). Existing unit has one DG set of 160 kVA capacity, to be used as standby during power failure. Additional DG Set will not be proposed. Stack (height3.0 m above roof level) is provided as per CPCB norms tothe existing DG set.

(xiv) As the terminal is providing only storage and handling services, there is no generation of process emission.

(xv) Details of Solid waste/ Hazardous waste generation and its management are as under

Waste	Quantity	Method of Disposal
Oil Water Sludge – generated from cleaning of storage tanks once in 5 years	50 kg	Authorized hazardous waste dealers approved by KPCB

(xvi) Public Hearing for the proposed project has been conducted by the Kerala State Pollution Control Board on 30th April 2018. No major issues were raised during the public hearing.

(xvii) Status of Litigation Pending against the proposal, if any: No litigation is pending against the project.

(xviii) The details of products and capacity as under:

(a) Existing storage tanks and capacities are as under:

Tank No	Tank Dimensions (diameter in m x height in m)	Safe Storage Filling Capacity in m^3	Petroleum Product	Petroleum Product Class
T-101	11 x 10.7	1000	Furnace Oil	C
T-102	10 x 10	750	Furnace Oil	C
T-103	20 x 16.5	5000	Furnace Oil	C
T-104	20 x 16.5	5000	Furnace Oil	C
T-105	20 x 16.5	5000	Furnace Oil	C
T-201	18 x 18	4500	Methanol	A
T-202	18 x 18	4500	Methanol	A
T-203	18 x 18	4500	Methanol	A
Total		**30250**		

(b) Proposed storage tanks and capacities are as under:

Tank No	Safe Storage Filling Capacity in m^3	Tank Dimensions (diameter in m x height in m)
T-204	5000	18 x 20
T-205	5000	18 x 20
T-206	4000	16 x 20
T-207	4000	16 x 20
Total	**18000**	

42.5.3.2 The proposal was last considered by the EAC in its meeting held on 27-29 August, 2018 wherein the EAC desired for more inputs and clarifications in respect of the following:

- Confirmation from the State CZMA regarding non applicability of the CRZ Notification, 2011.
- Project site being located at 5.8 km from Mangalavanam Bird sanctuary i.e. within 10 km, clearance from the Standing Committee of NBWL under the Wildlife (Protection) Act, 1972.
- Confirmation from the State Wetland Authority regarding the project site not in the command area of Vembanad lake, and the proposed activities not in violation of the Wetland Rules, 2010.

42.5.3.3 In response to the above observations, parawise replies submitted by the project proponent are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1.	Confirmation from the State CZMA regarding non-applicability of the CRZ Notification, 2011	The Cochin Port Trust vide letter dated 15th September, 2018, has informed that the project site is out of the CRZ area.
2.	Project site being located at 5.8 km from Mangalavanam Bird sanctuary i.e. within 10 km, clearance from the Standing Committee of NBWL under the Wildlife (Protection) Act, 1972	Online application for clearance from the standing committee of NBWL submitted on 15th September, 2018.

3.	Confirmation from the State Wetland Authority regarding the project site not in the command area of Vembanad lake, and the proposed activities not in violation of the Wetland Rules, 2010.	An application has been submitted to state Wetland Authourity. The project site is 75 m away from the Vembanad Lake and hence the proposed expansion is not a prohibited activity and does not fall under the Wetlands (Conservation and Management) Rules, 2017.

42.5.3.4 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of liquid storage terminal at Plot No.A1, A2, A3, South End, Willingdon Island, Kochi (Kerala) by M/s Ganesh Benzoplast Limited.

The project/activity is covered under category B of item 6(b) 'Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules1989 amended 2000)' of schedule to the Environment Impact Assessment (EIA) Notification, 2006. However, due to absence of SEAC in the State, the project was first appraised by the sectoral Expert Appraisal Committee (EAC) and now to be concluded at central level.

The State Expert Appraisal Committee (Kerala) in its 84th meeting held during 23rd January 2018 has recommended Terms of References (ToRs) for the Project. The ToR has been issued by SEAC Kerala vide minutes of 84th meeting, as item No. 84.15 dated 23rd January, 2018. Public Hearing has been conducted by the Kerala State Pollution Control Board on 30th April 2018.

Total fresh water requirement is estimated to be 0.5 cum/day to be met from the Cochin Port Trust. No industrial effluent will be generated at the project site. Sewage generated from domestic sources will be sent to septic tank followed by 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. The additional information submitted by the project proponent in reply to the observations of the EAC was found to be satisfactory and addressing its concerns in letter and spirit.

Consent to Operate for the present storage has been obtained from the State PCB vide letter dated 4th July, 2018, which is presently valid up to 30th June, 2023.

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

- *The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*

- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Total fresh water requirement shall not exceed 0.5 m^3/day proposed to be met from Cochin Port Trust. Prior permission shall be obtained from the concerned regulatory authority/CGWA.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width 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 and in consultation with the State Forest Department.*
- *At least 1% 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.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data to be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*
- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling has to be undertaken on regular basis to control the polluting particles.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *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.*
- *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month. onsite and off-site Disaster Management Plan shall be implemented.*

- *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.*
- *Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *Unit should carry out safety audit and report submitted to the Regional Office. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

Agenda No.42.5.4

Expansion of Active Pharmaceuticals Ingredients and API Intermediates Manufacturing unit with R&D facility of total capacity 11601 TPA with 3 MW coal/husk/pellets based Captive Power Plant by M/s Porus Laboratories Pvt Ltd Unit-IV at Sy. No. 87, 92/10, 106/1c, 106/2c, 107/2a, 107/2b, 107/3, 108/1b and 108/2, Village Akkireddigudem, Tehsil Musunuru, District Krishna (Andhra Pradesh) - For Environmental Clearance

[IA/AP/IND2/62432/2015, J-11011/265/2015-IA-II(I)]

42.5.4.1 The project proponent and the accredited Consultant M/s KKB Envirocare Consultants Pvt. Ltd., Hyderabad, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for Environmental Clearance to the project Proposed expansion of Active Pharmaceutical Ingredients (APIs)) & API Intermediates manufacturing Unit with R&D facility (11601 TPA) and 3 MW Coal / Husk / Pellets fired Captive Power Plant at Sy.No: 87, 92/10, 106/1c, 106/2c, 107/2a, 107/2b, 107/3, 108/1b and 108/2, Akkireddigudem (V), Musunuru (M), Krishna District, Andhra Pradesh by M/s Porus Laboratories Pvt. Ltd., Unit-IV.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 2nd EAC meeting held during 16th December, 2015 and reconsidered in 7th EAC meeting held during 28th April, 2016 and recommended Terms of References (ToR) for the Project. The ToR has been issued by Ministry vide letter no. J-11011/265/2015-IA II(I) dated 23-01-2017.

(iii) Proposal for ToR Amendment was considered in 33rd EAC meeting held during 24th January, 2018 and Amended ToR copy was issued dated 7th May, 2018.

(iv) All projects are listed at S.N. 5 (f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(v) Ministry has issued EC earlier vide letter no. J-11011/1101/2007-IA-II (I); dated 02-02-2009 to the existing project in favour of M/s Porus Laboratories Pvt. Ltd., Unit-IV (formerly Porus Drugs & Intermediates Pvt. Ltd

(vi) Existing land area is 64818 m^2, additional 37433.41 m^2 land will be used for proposed expansion. Total area would be 102251.41 m^2 (10.23 Ha). Industry will develop greenbelt in an area of 46.21 % i.e. 47248.64 m^2 out of total area of the project.

(vii) The estimated project cost is Rs. 80.25 Crores including existing investment of Rs.24.96 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 31 crores including existing Rs. 4.3 Crores and the Recurring cost (operation and maintenance) will be about Rs. 38.12 crores per annum.

(viii) Total Employment will be 200 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate Rs. 138 lakhs of 2.5% of capital cost towards Corporate Social Responsibility (Enterprise Social Commitment).

(ix) As per the MoEF&CC OM vide F. No. 22-65/2017-IA.III dated 01-05-2018, industry proposes to allocate Rs. 55 lakhs i.e., 1% of capital cost towards Corporate Environment Responsibility.

(x) There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10km distance. River Tammileru is flowing at a distance of 8.4 km in E direction. Water bodies like Vempadu Major Canal is at a distance of 0.23 km in W direction; Pond near Akkireddigudem is at a distance of 0.4 km in E direction; Pond near Ramanakkapeta is at a distance of 1.15 km in W direction; Ramalinga Cheruvu is at a distance of 4 km in SE direction; Pappana Cheruvu is at a distance of 5 km in SW direction; Nalla Cheruvu is at a distance of 6 km in SE direction; Pedda Cheruvu is at a distance of 3.3 km in E direction.

(xi) Ambient air quality monitoring was carried out at 9 locations during March to May 2016 and submitted baseline data indicates that ranges of concentrations of PM_{10}:18- 49µg/m^3, $PM_{2.5}$: 9-24µg/m^3, SO_2: BDL-14.6µg/m^3 and NO_2: BDL-15.8µg/m^3respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.82 µg/m^3, 9.47 µg/m^3 and 6.65 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xii) Total water requirement is 1587 m^3/day of which fresh water requirement of 758 m^3/day will be met from ground water through bore wells and private tankers. Effluent of 938 KLD quantity will be treated through Effluent Treatment plant. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 950 kVA including existing 700 kVA and will be met from Andhra Pradesh State Power Distribution Corporation limited (APSPDCL). Existing unit has 2 DG Sets of 320 kVA & 380 kVA capacities, additionally 2 nos. of DG sets of 1000 kVA and 3 nos. of 500 kVA will be used as standby during power failure. Stack height of 11 m for 1000 kVA DG set each, 9 m for 500 kVA each will be provided as per CPCB norms to the proposed DG sets. Industry is also proposing 3 MW Coal / Husk / Pellets fired Captive Power Plant.

(xiv) Existing unit has 5 TPH coal fired boiler. Additionally 30 TPH Coal (less than 0.5% Sulphur content)/Husk/Bio-Pellets fired boiler for 3 MW Captive Power Plant, 10 TPH and 8 TPH boiler coal/husk/pellets fired boilers will be installed. Electrostatic Precipitator with a stack of height of 55 m for 30 TPH boiler, Multi cyclone separator & bag filter with a stack of height of 40 m for 10 TPH and 30 m for 8 TPH boiler will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm^3 for proposed boilers. Proposed 8 TPH boiler in addition to the existing 1 lakh Kcal/hr Diesel fired Thermic Fluid Heater will be standby after expansion. Existing 5 TPH boiler will be dismantled after expansion.

(xv) Details of Process emissions generation and its management.

S. No	Process Emission	Maximum Quantity (kg/day)	Treatment
1	HCl	871.9	• Scrubber with water / caustic solution
2	Monomethylamine	230.9	• Scrubber with water
3	H_2	91.4	• Diffused with flame arrestor
4	CO_2	1407.7	• Dispersed into atmosphere
5	SO_2	500	• Scrubber using caustic solution.

(xvi) Details of Solid waste/ hazardous waste generation and its management are as under:-

S. No.	Source	Proposed Quantity (TPD)	Handling Method	Disposal
1.	Organic residue	11.2	HDPE Drums	Sent to SPCB Authorized Cement industries / TSDF
2.	Spent Carbon	3.7		
3.	Distillation Bottom Residue (1% of spent solvents)	1.8		
4.	Inorganic & Evaporation salt (Process)	62.4	HDPE Bags	
5.	Evaporation salt (Non-Process)	3.5		
6.	ETP Sludge	10		
7.	Boiler Ash	42	Stored in covered area	Sold to Cement industries/ Brick Manufacturers
Other Hazardous Waste generation from the Plant				
8.	a) Detoxified Container / Liners drums, HDPE Carboys, Fiber Drums	1000 Nos./ month	Designated covered area	Disposed to SPCB Authorized agencies after complete detoxification
	b) PP Bags	200 Kg/month		
9.	Spent solvents (with moisture) (solvents 178+water 7)	185 KLD	Stored in Drums / Tanks	Sent to In-house Solvent Recovery System
10.	Recovered Solvents from spent solvents	165 KLD	Stored in Drums / Tanks	Recovery within the premises duly sending the residue to Authorized agencies
11.	Spent Mixed solvents (13 from SRS + 4 from ETP)	17 KLD	Stored in Drums / Tanks	Recovery within the premises / Sent to SPCB Authorized agencies
12.	Waste oils & Grease	3 KL/A	Stored in Drums	Sent to SPCB Authorized agencies for

				reprocessing / recycling.
13.	Used Lead acid Batteries	100 Nos. / annum	Designated covered area	Sent to suppliers on buy-back basis.
14.	Misc. Waste (spill control waste)	24 TPA	Stored in Drums	TSDF
15.	Spent Catalyst	8.4 TPA	Stored in Drums	Sold to suppliers on buy-back basis.

Non-Hazardous Waste Generation, Handling and Disposal

S. No.	Waste	Quantity (TPD)	Quantity (TPA)	Handling	Disposal option
1.	Used Insulation waste, PVC Scrap, HDPE & PP scrap, Paper waste, Used Thermocouple waste, Glass scrap, Iron scrap, SS scrap, Aluminium & other Metal Scrap, Cotton waste (used aprons/ uniforms, etc.), Packing wood etc.,	1	360	Storage yard	Sent to outside agencies for recycling
2.	Kitchen waste from canteen	0.2	72	HDPE Drums	Composted on site and reused for green belt

Biomedical Waste and E- Waste Generation, Handling & Disposal

S. No.	Waste	Quantity (kg/day)	Quantity (TPA)	Disposal option
1.	Category : Yellow (h) **Decontaminated media from Microbiology Lab**	20	7.2	Pre-treat to sterilize with non-chlorinated chemicals on-site as per BMW Rules and sent to PCB authorized agency for incineration.
2.	Category: White **Waste sharps from OHC** (Needles, syringes, scalpels, blades, glass, etc.)	0.10	0.036	Autoclaving and sent to PCB authorized agency.
3.	Category : Yellow (c) **Soiled Waste from OHC** (cotton, dressings, soiled plaster casts, other material)	0.30	0.108	Sent to PCB authorized agency for incineration.

S. No.	Waste	Quantity (kg/day)	Quantity (TPA)	Disposal option
4.	e – waste	10	3.6	Sent to authorized E-waste collection centres/ registered dismantlers / authorized recyclers/ return back to manufacturers.

(xvii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 16th February, 2018. The main issues raised during the public hearing are related to 1) Additional employment with preference to locals in expansion, 2) Proper environmental protection measures during expansion, 3) Plantation development, 4) Rain water harvesting pits outside the premises, 5) Conducting medical camps.

(xviii) Certified Compliance report for EC and CFO conditions were issued by Andhra Pradesh State Pollution Control Board dated 22-03-2018 (As per the MoEF&CC Circular vide No. J-11013/6/2010-IA.II (Part) dated 07-09-2017).

(xix) The details of products and capacity as under:

S. No.	Product	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)
1.	Bisphenol Acetophenone	--	120	120
2.	P-Phenolphthalein bisphenol (or) 2-Phenyl-3,3-Bis (4-Hydroxyphenyl) Phthallimide (PPPBP)	--	3600	3600
3.	1,5-Bis-[2,6-dimethyl-4-(2-methyl-2-propenoxy) phenyl}-penta-(2,6-dimethyl-1,4-phenyleneoxide (MX-9000)	--	500	500
4.	Tetramethyl bisphenol acetone (TMBPA)	--	99.6	99.6
5.	[1,1,1-Tri-(4-hydroxyphenyl)] ethane (THPE)	--	99.6	99.6
6.	4-Hydroxybenzonitrile (HBN)	--	99.6	99.6
7.	4-Nitro-N-Methyl Phthalimide (4-NPI)	--	5000	5000
8.	3-[2-(Dimethylamine)ethyl]-N-methyl-1H-indole-5-methane sulfonamide	--	132	132
9.	Sumatriptan Succinate	6	--	6
10.	Ciprofloxacin Hydrochloride	***600***	--	600
11.	Metformin Hydrochloride	600	(-360)	240
12.	Venlafaxine Hydrochloride	12	--	12
13.	Sertraline Hydrochloride	24	60	60
14.	Celecoxib	60	(-24)	36
15.	Clopidogrel Hydrogen Bisulfate	60	300	360
16.	Enrofloxacin	360	(-348)	12
18.	Gabapentin	24	576	600
Dropped products (as per EC dated 2-2-2009)				
1	Ibuprofen	***1200***	0	0
2	Paracetamol	***1200***	0	0
3	Pioglitazone	12	0	0

Total Production Capacity	**3000 (any 3 products)**	**---**	**11600.8**
R&D activity	--	0.2	0.2
Total Production Capacity (18 products at a time and R&D) With 3 MW Captive Power Plant			**11,601 (all products)**

List of By-products after expansion

S. No.	By-Product	Existing Quantity (TPA)	Proposed Quantity (TPA)	Total Quantity (TPA)	Product
1.	Piperazine ML's	3512.4	0	3512.4	Ciprofloxacin Hydrochloride
2.	N-Ethyl Piperazine ML's	2183.4	(2110.6)	72. 8	Enrofloxacin
3.	Spent Sulfuric Acid	--	88243	88243	4-Nitro-N-Methyl Pthalimide
Dropped By-products					
1	Hydrochloric Acid (25%)	3960	0	0	Ibuprofen
2	Aluminium hydroxide gel	5255.5	0	0	Ibuprofen
3	Cromic Sulphate solution	2501.7	0	0	Ibuprofen

42.5.4.2 The proposal was last considered by the EAC in its meeting held on 25-27 June, 2018 wherein the EAC in view of admissibility of the proposal in the name of the applicant, desired for transfer of existing environmental clearance dated 2nd February, 2009 from M/s Porus Drugs & Intermediates Pvt Ltd to M/s Porus Laboratories Pvt Ltd. Further, in view of substantial changes in survey nos, the proposal was not taken forward.

42.5.4.3 In response to the above observations, parawise replies submitted by the project proponent, are as under: -

S. No.	Clarifications/inputs sought by the EAC	Reply submitted by the project proponent
1.	Transfer of existing environmental clearance dated 2nd February, 2009 from M/s Porus Drugs & Intermediates Pvt Ltd to M/s Porus Laboratories Pvt Ltd	The existing environmental clearance dated 2nd February, 2009 has been transferred by the Ministry vide letter dated 20th September, 2018.
2.	Clarify the substantial changes in survey nos	Regarding the Survey Nos of our plots, we approached the Revenue Department (Office of the Tahsildar), Musunuru Mandai, Krishna District, Andhra Pradesh and obtained the Certified Survey Nos. of the existing project site and proposed additional site. The survey nos belongs to units are 87/3B2, 92/10, 106/1c, 106/2c, 107/2A, 107/2B, 107/3, 108/1B and 108/2.

42.5.4.4 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Active Pharmaceutical Ingredients & API Intermediates manufacturing Unit with R&D facility, from 3000 TPA to 11601 TPA by M/s Porus Laboratories Pvt Ltd Unit-IV in a total area of 10.23 ha at Sy.No.87/3B2, 92/10, 106/1C, 106/2C, 107/2A, 107/2B, 107/3, 108/1B and 108/2, Village Akkireddigudem, Mandal Musunuru, District Krishna (Andhra Pradesh).

The project/activities are covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 23rd January, 2017, followed by amendments therein on 7th May, 2018. Public hearing was conducted by SPCB on 16th February, 2018.

Total water requirement is estimated to be 1587 cum/day of which fresh water demand of 758 cum/day, is proposed to be met from Gram Panchayat through and private tankers. The committee suggested to take fresh water from the bore well within the premises.

Total effluent generated from different industrial operations is estimated to be 938 cum/day. Treated effluent of 829 KLD will be recycled in cooling tower makeup and used in boilers. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

The Ministry had earlier issued EC vide letter dated 2nd February, 2009 in favour of M/s Porus Drugs & Intermediates Pvt Ltd for expansion of bulk drugs manufacturing unit of capacity 3000 TPA at Survey No.106, 107/1&2, Village Akkireddigudem, Mandal Musunuru, District Krishna (Andhra Pradesh). The certified compliance report issued by Andhra Pradesh State Pollution Control Board vide dated 22nd March, 2018 is found to be satisfactory.

Consent to Operate for the present industrial operations has been obtained from the State PCB vide letter dated 24th October, 2016, which is presently valid up to 30th November, 2021.

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. The additional information submitted by the project proponent in reply to the observations of the EAC was found to be satisfactory, adequately addressing its concerns in letter and spirit.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*

- *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.*
- *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* 758 cum/day proposed to be met from ground water through bore wells. *Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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.*
- *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*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 5-10 m width 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.*
- *At least 1% 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.*

- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*

Agenda No.42.5.5

Expansion of Epoxy Hardening Plant at Sy. Nos.206 & 207, Village Luna, Tehsil Padra, District Vadodara (Gujarat) by M/s Admark Polycoats Pvt Ltd - For Environmental Clearance

[IA/GJ/IND2/35855/2015, J-11011/15/2016-IA II (I)]

42.5.5.1 The project proponent and the accredited Consultant, M/s Ramans Enviro Services Pvt. Ltd, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for expansion in manufacturing capacity of epoxy hardeners from 1000 MT/month upto 2000 MT/month by M/s Admark Polycoats Pvt Ltd in the existing premises at Sy. Nos.206 & 207, Village Luna, Taluka Padra, District Vadodara (Gujarat).

(ii) All Synthetic Organic Chemicals Industry located outside the notified industrial area are listed at S.N. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A' and appraised at Central level by Expert Appraisal Committee (EAC).

(iii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 4th meeting held during11-12 February, 2016 and recommended Terms of Reference (ToRs) for the project. The ToR has been issued by Ministry vide letter dated dated 31st March, 2016.

(iv) Ministry has issued EC earlier vide letter dated 1st September, 2009 for expansion of Epoxy Hardeners Plant from 35 MT/month to 1000 MT/month at Sr. No.207, Village Luna, Taluka Padra, District Vadodara (Gujarat).

(v) Existing land area is 14,215 sq.m, no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 5010 m^2 out of 14215 m^2 of area of the project.

(vi) The estimated project cost is Rs 250 lacs including existing investment of Rs 510 lacs. Total capital cost earmarked towards environmental pollution control measures is Rs. 35 lacs and the Recurring cost (operation and maintenance) will be about Rs. 5 Lacs per annum. Total Employment will be 10 persons as direct & 10 persons indirect after expansion. Industry proposes to allocate Rs 6.25 lacs @ of 2.5% towards Corporate Social Responsibility.

(vii) It is reported that no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. River Mahisagar is flowing at a distance of 4.6 km in North-West direction.

(viii) Ambient air quality monitoring was carried out at 6 locations during 7th March, 2016 to 27th May, 2016 and submitted baseline data indicates that ranges of concentrations of PM10 (81.2 - 112.3 µg/m3), PM2.5 (39.5 - 53.8 µg/m3), SO2 (12.8 - 15.3 µg/m3) and NO2 (17.0 - 25.8 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.03 µg/m3, 7.61 µg/m3 and 0.58 µg/m3 with respect to PM10, SOx and NOx, impact of which will be limited to within the site premises. Hence the resultant concentrations in the baseline area would not increase due to the proposed expansion project.

(ix) Total water requirement is 41 m^3/day, of which fresh water requirement is of 41 m^3/day and will be met from existing borewell on site.

(x) Power requirement after expansion will be 300 kVA including existing 200 kVA and will be met from Gujarat Electricity Board (GEB). Existing unit has 1 DG set of 320 kVA capacity; no additional DG sets are used as standby during power failure. Stack (height 5 m) will be provided as per CPCB norms for the existing DG sets of 320 kVA which will be used as standby during power failure.

(xi) Details of Solid waste/ Hazardous waste generation and its management are as under:

Sr. No.	Waste Description	Category	Quantity (Per Annum)		Disposal
			Consented	Ultimate	
1	Used Oil	5.1	250 L	500 L	Collection, storage and sale to registered recyclers or re-users.
2	Polymerized Solid Waste*	23.1	5 MT	15 MT	To Common Hazardous Waste Incineration facility of NECL.
3	Discarded Containers	33.3	2000 nos.	400 MT	Collection, storage and transportation to registered / authorized recyclers - M/s Maruti Enterprise.

(xii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 19th April, 2017.
(xiii) Certified compliance report submitted by RO, MoEF&CC dated 9th January, 2018 are submitted to the Ministry.
(xiv) There are no litigations pending against the project.

(xv) List of existing and proposed product is as under:

S. No.	Name of Product	Quantity in MT/month		
		Existing	Proposed	Ultimate
1	Epoxy Hardeners	1000	1000	2000

42.5.5.2 The proposal was last considered by the EAC in its meeting held on 28-29 August, 2017 and 26-28 February, 2018, wherein the EAC insisted for the action taken report/replies submitted by the project proponent in response to earlier observations of the Regional Office, to be examined for their comments.

42.5.5.3 During deliberations, the EAC noted the following:-

The proposal is for expansion of epoxy hardeners manufacturing unit from 1000 MT/month to 2000 MT/month by M/s Admark Polycoats Pvt Ltd in the existing premises of area 14215 sqm at Sy. Nos.206 & 207, Village Luna, Taluka Padra, District Vadodara (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of the Schedule to Environmental Impact Assessment Notification, 2006, and requires appraisal at Central Level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR for the project was granted on 31st March, 2016, and the public hearing was conducted by SPCB on 19th April, 2017.

Total fresh water requirement is estimated to be 41 cum/day proposed to be met from existing borewell. Permission for the same has obtained from CGWA vide letter dated 16th May, 2018.

Total effluent generated from different industrial operations is estimated to be 11.8 cum/day. Effluent of 7.8 KLD will be send for amine recovery and 1.4 KLD to the CETP for further treatment, remaining effluent of 2.6 KLD will be recycled after treatment.

The Ministry had earlier granted EC vide letter dated 1st September, 2009 for expansion of epoxy hardeners plant from 35 TPM to 1000 TPM. The certified compliance report for the said EC was earlier forwarded by RO, MoEF&CC vide letter dated 9th January, 2018 based on site inspection carried out on 18th November, 2017. In view of the observations of the Regional Office, the EAC in its meeting held on 26-28 February, 2018, insisted for the action taken report. The same has now been forwarded by the Regional office vide letter dated 24th August, 2018 which was found to be satisfactory.

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. The additional information submitted by the project proponent in reply to the observations of the EAC was found to be satisfactory and addressing its concerns in letter and spirit.

Consent to Operate for the present industrial operations has been obtained from the State PCB vide letter dated 11th October, 2018, which is presently valid up to 30th June, 2024.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- Effluent of 7.8 cum/day shall be sent for amine recovery and 1.4 cum/day to the CETP.
- *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.*
- *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.*
- *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.*

- *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* 41 cum/day *to be met from* borewell*. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.*
- *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.*
- *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*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 5-10 m width 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.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*

- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*

Agenda No.42.5.6

Molasses based production of 60 KLD of Fuel Ethanol & 25T Incineration Boiler at premises of existing Sugar unit at Vill-Thaini, Post-Bankhedi, District Hoshangabad Narsimhapur (MP) by M/s Narmada Sugar Pvt Limited - For Environmental Clearance

[IA/MP/IND2/73313/2018, IA-J-11011/82/2018-IA-II(I)]

42.5.6.1 The project proponent and the accredited Consultant M/s Creative Enviro Services, Bhopal, made a detailed presentation on the salient features of the project and informed that:

(i) The proposal is for environment clearance to the project for setting up a 60 KLPD molasses based ethanol plant and 25 TPH Incineration Boiler within the existing premises of Sugar manufacturing unit of 4500 TCD and 30 MW Co gen plant at Village Pondar, Tahsil Gadarwara, Dist. Narsinghpur (Madhya Pradesh) by M/s Narmada Sugar Pvt Limited.

(ii) The standard Terms of Reference (ToR) has been issued by the Ministry vide letter no. IA-J-11011/82/2018-IA-II(I) dated 8th April, 2018.

(iii) All Molasses based distillery are listed at S.N. 5(g) ii of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Total land available with the proponent is 35.298 acres out of which 4.25 acres of land have been earmarked for proposed project, Land occupied by existing sugar /co gen unit is about 21.5 acres. Green belt has been developed within the existing premises covering an area of about 2 acres with approx 100 numbers of plants. Total plantation is proposed over 12 acres of area with 9700 number of trees out of 35.298 acres of total land, which is more than 33%.

(v) The estimated project cost is Rs.198.48 crore including existing investment of Rs.13490 Lacs. Total capital cost for environmental measures is proposed as Rs.25.89 crores including of existing capital cost of 4.98 crores. The recurring cost (operation and maintenance) will be about Rs 66.23 lacs per annum including of existing recurring cost of Rs.34.43 Lacs.

(vi) Total Employment will be 250 persons after expansion as direct & 600 persons as indirect after expansion. Industry proposes to allocate Rs. 64 lacs @ 1% of project cost towards Corporate Social Responsibility. Budget of Rs 5.50 Lacs per annum is proposed for execution of need base programme for the socio-economic development of the area.

(vii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Reserve or protected forest and Wildlife Corridors etc. lies within 10 km distance from the project site. Seasonal Umar River is flowing at a distance of 3.25 km in north direction.

(viii) Ambient air quality monitoring was carried out at 8 locations during March to May 2018 and submitted baseline data indicates that ranges of concentrations of PM10 (41.39-65.47 µg/m3), PM2.5 (16.56-26.38 µg/m3), SO2 (<6.00 µg/m3) and NO2 (<8.00- 13.24 µg/m3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.067µg/m3, 3.99µg/m3 and 1.02µg/m3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(ix) For proposed fuel ethanol unit, total water requirement is estimated to be 1103 KLD and after recycling & reuse of 637 KLD of water, net fresh water requirement is estimated to be 466 KLD. Whereas the total raw water requirement for the existing sugar unit operation is reported as 3540 KLD which is being fulfilled by recycling of water generated during sugar manufacturing. The water requirement will be met from Ground water resources.

(x) Multi-Effect Evaporation system followed by Incineration boiler is proposed for treatment of concentrated spent wash of 156 KLD to maintain zero discharge condition. The concentrated spent wash generated after entire process of evaporation is sprayed in a furnace with auxiliary fuel and is then burnt in a boiler.

(xi) Power requirement after additional of fuel ethanol plant will be 1050 KWH excluding existing requirement of 5.68 MW and will be met from existing Co generation unit of 30 MW and proposed co gen unit of 2.5 MW. Existing unit has 02 DG sets of 1000 KVA capacity, and are used as standby during power failure.

(xii) Existing unit has 150 TPH bagasse fired boiler and provided with ESP. ESP with a stack of height of 60 m will be installed for controlling the particulate emissions (within statutory limit of 150 mg /Nm3) for proposed 25 TPH concentrated spent wash & bagasse fired boiler.

(xiii) Details of process emissions generation and its management. Major emission are identified as Particulate matter, SO2, NOX will be generated from the fuel (Bagasse/spent wash) combustion whereas other air emissions like VOC from distillation columns, CO_2 and ethanol from fermentation process may also generates from the process. Following measures are proposed for implementation:

- ESP shall be provided at stack of boiler to control the emission below 150 mg per cubic meter.
- Adequate stack height of 60 mt for boiler shall be provided for better dispersion.
- Dust collectors system shall be provided at various material transfer points.
- Online continuous monitoring system shall be provided for stack of boiler
- Development of green belt in time bound manner in consultation with forest department.
- Provision of dust mask for workers and instruction of compulsory use.
- Regular maintenance and water spraying arrangement over approach and internal road of the unit.
- CO_2 generated during the fermentation process is being/will be collected by utilizing CO_2 Scrubbers.

(xiv) Details of Solid waste/hazardous waste generation and its management is as under:-

Solid Waste Details				
S. N.	**Type of waste**	**Quantity**		**Disposal**
1.		**From existing sugar &-cogeneration plant**	**Proposed Distillery**	
2.	Yeast	-	0.25 Kg/day	Mixed yeast sludge may be

	Sludge			used as manure or dried yeast will be used as supplement to cattle feed
3.	Lime Sludge	0.07 MT/day	-	Mixed with sewage sludge and used as manure
4.	WTP Sludge	0.01 MT/day	-	
5.	ETP Sludge	0.04 MT/day	-	As manure
6.	Ash	**Bagasse ash:** 18.93 MT/day	Spent wash Ash ; 2.3 MT/day	Fertilizer
7.	Domestic waste	0.01 MT/day		N A

Details of Hazardous Waste Management			
Sr. No.	**Description of Hazardous Waste**	**Quantity Per Year**	**Treatment Disposal**
1	Used Oil	<500 lit	Stored in HDPE drums and given to re-cyclers authorized by MPPCB/MoEF
2	Waste Resin From DM plant	200 Kg	Stored in MS Drums and shall be disposed off at TSDF, Pithampur
3	Waste activated Carbon	50-75 Kg	Stored in MS Drums and shall be disposed off at TSDF Pithampur

(xv) Public Hearing for the proposed project has been conducted at site by the State Pollution Control Board on 20.08.2018 at site. People were provided their consent for the project.

(xvi) Certified compliance report is not applicable for the proposed project. The existing project of sugar manufacturing unit of 4500 TCD is in operation, which does not require environment clearance.

(xvii) No litigation is pending against the proposal

(xviii) Following are the existing and proposed products:

S. No.	**Product Details**	**Existing Quantity**	**Proposed Quantity**	**Total Quantity**
1.	Sugar	4500 TCD	-	4500 TCD
2	Power	30 MW	2.5 MW	32.5 MW
2.	Ethanol	-	60 KLPD	60 KLPD

42.5.6.2 During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up 60 KLPD molasses based ethanol plant within the existing premises of Sugar unit by M/s Narmada Sugar Pvt Limited in an area of 4.25 acres (out of total 35.298 acres) at Village Pondar, Tahsil Gadarwara, District Narsinghpur (Madhya Pradesh).

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 at Central level by the sectoral EAC in the Ministry

The ToR for the project was granted on 8th April, 2018. Public hearing was conducted by SPCB on 20th August, 2018.

Total water requirement is estimated to be 1103 cum/day, of which fresh water demand of 390 cum/day is proposed to be met from ground water. NOC for ground water withdrawal for existing operations i.e. 74 cum/day has already been obtained by the CGWA.

Effluent of 156 cum/day will be generated and treated by Multi-Effect Evaporation system followed by incineration boiler. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Consent to Operate for the present industrial operations has been obtained from the State PCB vide letter dated 1st January, 2018, which is presently valid up to 30th November, 2018.

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 duly addressed by the project proponent.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 1st October, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed 390 cum/day proposed to be met from* ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse.*
- *The distillery shall be permitted to operate throughout the year as proposed.*
- *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.*
- *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.*
- *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.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.

(v) Venting equipment through vapour recovery system.
(vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.5.7

Manufacturing of Sodium Cyanide Other Cyanide based products at Plot No.26-37, 54-57, 122, 143, Village Asnabad, Tehsil Olpad, District Surat (Gujarat) by M/s Hindustan Chemicals Company Ltd.

[J-11011/466/2011-IA-II(I)]

42.5.7.1 The Hon'ble National Green Tribunal (Western Zone) Bench, Pune vide order dated 7th December, 2017 in Appeal No.17/2016 (WZ) in the matter of 'Gujarat Khedut Samaj & othrs Vs MoEF&CC & othrs' regarding environmental clearance granted by the Ministry to the expansion project of M/s Hindustan Chemicals Company has directed the following:-

(a) The EC dated 22nd January, 2016 granted to the expansion project of M/s Hindustan Chemicals Company is set aside.
(b) The EAC of MoEF shall consider the outcome of the public consultation including public hearing dated 14th November, 2014 along with suggestions/objection/documents made/raised/submitted by the stakeholders including the parties to the appeal, and the

EAC shall take appropriate decision in the matter within sixty days and make recommendations accordingly to the MoEF in accordance with law.

(c) Liberty granted to the parties to make representations to the EAC along with all the relevant material in their possession or control within two weeks.

(d) MoEF is directed to take decision in light of the recommendations made by the EAC in accordance with law.

42.5.7.2 In compliance of the directions of Hon'ble Tribunal, the proposal was considered by the Expert Appraisal Committee in its meeting held on 27-28 March, 2018. The Committee, after deliberations, recommended the following:-

- The Appellants may be consulted/heard in person during next meeting of the EAC, along with their submissions and suggestions to the Committee, if any, for better understanding of the case and also for the Committee to take appropriate decision in the matter.
- The Environment Department of the State Government may be requested for their comments on the public hearing conducted by the State Pollution Control Board on 14th November, 2014, and also on the suggestions/objections/documents submitted by the stakeholders. Such comments may address the pollution concerns vis-à-vis the developmental projects in the study area.
- The Ministry may file an application before the Hon'ble Tribunal for extension and seeking adequate time to comply with their orders in letter and spirit.

In line with the above recommendations and subsequent approval in the Ministry, State Government/GPCB was requested vide Ministry's letter dated 12th April, 2018 to provide comments on the public hearing conducted by the State Pollution Control Board on 14th November, 2014, and also the suggestions/objections/documents submitted by the stakeholders at that stage.

42.5.7.3 The proposal was further considered by the EAC in its meeting held on 24-26 April 2018, wherein the Committee noted the following:

The Ministry had granted environmental clearance vide letter dated 22nd January, 2016 in favour of M/s Hindustan Chemicals Company for the project 'Manufacturing of Sodium Cyanide & other Cyanide based products' at Plot No.26-37, 54-57, 122, 143, Village Asnabad, Tehsil Olpad, District Surat (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulation)' of Schedule of Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 17th February, 2012 and the public hearing was conducted on 14th November, 2014 by the Gujarat Pollution Control Board. However, the proposal for environmental clearance was appraised by the EAC, considering the project site located in notified Industrial area (Olpad Industrial Area) and thus exempting from public consultation/hearing. The EC dated 22nd January, 2016 granted to the project finds mention that public consultation/hearing was exempted as per section 7(i), III stage (3) Para (i)(b) of the EIA Notification, 2006.

The proceedings of public hearing dated 10th November, 2014 conducted by Gujarat SPCB, were made available by the project proponent during the EAC meeting on 24-26 April, 2018. The concluding remarks of the same quotes as under:-

'*Chairman of the public hearing and District Magistrate informed that this public hearing was commenced at about 4 pm. The people present here were protesting against the company from the very beginning itself. Local public have represented several objections against the company. They have also raised the question about the GIDC land issues. All the representations have been patiently listened to by the panel and also received number of written representations. All these representations will be forwarded to Ministry of Environment and Forest, New Delhi. Company had not given the satisfactory answer and my question also remains unanswered. Company has stated that the replies would be submitted subsequently. Due to heavy protest from the people present here demanded that not only the expansion of the production shall be rejected but the EC sanctioned earlier should also be cancelled. He declared the public hearing completed with expressing thanks to the people*.'

The Committee took serious note of the concerns raised during public hearing, which appeared to be neither technically concluding nor implying/facilitating consideration of the proposal for grant of environmental clearance. The Committee, however, desired for circulation of the public hearing proceedings to all its members for further deliberations and also insisted for detailed comments of the State Government to decide further course of action.

42.5.7.4 Later, the proposal was placed before the sectoral EAC in its meeting held on 25-27 June, 2018. This time, the Committee sought time to review the public hearing proceedings dated 10th November, 2014, and also suggested the Ministry to follow up with the State Government for seeking their comments to facilitate consideration of the proposal in compliance of the orders of Hon'ble Tribunal. Meanwhile, the State Government/GPCB vide letter dated 12th August, 2018 has forwarded copy of proceedings of public hearing and also the parawise replies by the project proponent in response to the written representations received.

The proposal was again listed for consideration in another meeting of the EAC held on 27-29 August, 2018. However, due to the project proponent being absent, the matter could not be taken up.

42.5.7.5 During deliberations in the meeting held on 29-31 October, 2018, the Committee noted the major concerns raised by the public, which inter-alia included discharge of treated effluent to Masma Khadi, recurrence of Bhopal gas tragedy due to leakage of Methyl Isocyanate, incinerator not in operation, GIDC land issues, etc. In response, parawise replies submitted by the project proponent are as under:-

(i) HCC had stopped discharge in Masma Khadi and this was verified by GPCB. HCC had implemented zero liquid discharge since April 2016.
(ii) Gas leak/discharge from the plant cannot be compared with the leakage of Methyl Isocyanate (MIC) due to Hydrogen Cyanide being lighter, lesser vapour density and much lesser storage at an elevation of 15 m. However, to avoid any gas leakage, company has incorporated inherent safety features in accordance with 'The International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold', which include the following:-

- The system is designed to be kept under vacuum. In view of this, no leakage due to accident can travel outside the plant.
- Source of Electricity is GEB and DG Sets; UPS is kept for emergency power backup.
- All the off gases are burnt in incinerators. Emissions from stack are being monitored online and real time data is transferred to CPCB on continuous basis.
- Automatic diversion of reaction gases to incineration is maintained by failsafe/automatic interlocks.

- Online gas detection system has been installed at strategic locations along with an automatically sensor activated gas diluting system including a multitier water sprinkler system.
- Rich water tank provided below HCN storage tank for dumping material immediately during emergency.
- HCN transfer lines are double piped with circulating chilled brine at high pressure & HCN under vacuum, so that in the event of any leak, brine will go inside pipe preventing any HCN leak.
- All the pipe lines carrying toxic substances are continuous welded & joints with tongue and groove flanges.
- Well-designed ring type pressurized firefighting system with sprinklers has been installed for water curtain and absorption of gases.
- Strict adherences to work permit system is in place.
- All employees are well equipped with personal protective equipment including respiratory & non-respiratory.
- HCC has a well-designed occupational health centre with fulltime medical officer, supported by paramedical staff round the clock.
- Company has well designed Emergency Response Plan, and practices mock drill at regular intervals.
- The facility also has mutual aid agreements with many nearby industries and hospital which is connected by wireless with all nearby MAH units, Surat.

(iii) It was informed that the incinerators installed within the plant were fully in operation, stacks regularly monitored online and connected to CPCB. However, incineration for solid waste, has been discontinued with due permission of GPCB, and the solid waste is disposed off to TSDF sites. HCC is a member of NECL, Nandesari and BEIL, Bharuch for disposal of solid waste.
(iv) The proposed sodium cyanide plant would be based on latest technology having 'Direct Absorption Low Pressure Vacuum Technology', where HCN vapours are directly absorbed into caustic soda solution to produce NaCN. Hence there is no storage of liquid Hydrogen Cyanide. As a result, a small quantity (approx.5- 6 kg) of vapours of HCN are retained in connecting pipes, and thus the negligible risk.
(v) On March 16, 2015, a thirteen member Technical Expert Committee formed by GPCB, had done a study of Health, Industrial Safety & Environmental Aspects including public consultation and also had a meeting with local people, which clearly states that '*looking at the past track record and compliance, company should be allowed to continue operation with additional stringent safety norms as required by Government Authority. Permanently closing down of company as per agitators' demand in the Public Hearing is not admissible as it will affect the employment of permanent as well as contract workers and many dependent services like transportation, drivers, suppliers, buyers, etc*.'
(vi) Regarding land issues, it was informed that the proposed expansion is on the existing project site, which has been in possession for the last thirty five years.

42.5.7.6 The project proponent also presented a 3D model of gas dispersion using advanced modelling software for HCN, Ammonia & Chlorine, which showed that there are no specific risks associated to nearby villagers as company has very strong mitigation measure as per international standards.
During deliberations, the Committee also took cognizance of the following:-

- HCC is a signatory to UNEP, cyanide code 22. HCC facilities are regularly inspected under UNEP agency every three years with respect to upgradation of technology and safety.
- There has been no record of public grievances except as reported during Public Hearing.

- Each and every point raised during public hearing has been scientifically discussed and observed that the facilities is meeting international standards and are safe with respect to public, environment and process safety.
- Cyanide and cyanide based chemicals are important chemicals used in extraction of gold and other precious metals, electroplating, plastic manufacturing, organic synthesis including pharmaceuticals and analytical testing.

42.5.7.7 The Member Secretary questioned the need for risk assessment studies using 3D modelling presented by the project proponent without any specific directions of the NGT and/or recommendations of the Committee in its earlier meetings. He insisted for the petitioners/appellants and other stakeholders to be heard as per the directions of the NGT. Further, in view of proceedings of the public hearing, he suggested for comments of the State Government/SPCB also.

42.5.7.8 *The EAC, in the first instance, acknowledged the importance of public hearing as a part of public consultation, while considering environmental clearance to any project having significant safety concerns as in the instant case. The Committee, however, after deliberations, taking note of majority of the suggestions in support of the proposal and especially considering the gas dispersion and mitigation measures undertaken, recommended the proposed expansion project for grant of environmental clearance, subject to compliance of additional terms and conditions as under:*

- *Online Gas Detector for Hydrogen Cyanide to be calibrated to 1 ppm level from 4 ppm at present to have further safety assurance.*
- *At least 5% of total cost of the project to be earmarked towards the Enterprise Social Commitment based on local needs and action plan with financial and physical breakup/details should be prepared and submitted to the Ministry's Regional Office of MoEF & CC. Implementation of such program should be ensured accordingly in a time bound manner.*

Agenda No.42.5.8

Expansion of Bulk Drug Manufacturing Unit at Survey No.110, IDA Gaddapotharam, Jinnaram Mandal, District Sangareddy (Telangna) by M/s Emmennar Pharma Pvt Ltd - For Environmental Clearance

42.5.8.1 The project proponent and the accredited consultant M/s Pridhvi Envirotech Private Limited, made a detailed presentation on the salient features of the project and informed that:

(i) Earlier ToR was granted to the unit vide dated 19th May, 2014 in absence of State Expert Appraisal Committee. Mean while State Level Committee was formed in Telangana and project was transferred to State level from MOEF through letter dated 10th December, 2015. Thereafter proposal for EC was considered in the SEAC meeting held on 10.01.2017 and subcommittee was constituted for site inspection. The Subcommittee of SEAC visited the unit and submitted their report dated on 1st March, 2017. SEAC again considered the proposal in the meeting held on 18th March, 2017 and recommended the proposal for EC. During processing SEIAA raised some queries to SEAC for detailed examination on 06.05.2017. The same has verified and given clarification by SEAC to the queries raised by SEIAA and recommended the project for issue of EC. After that SEIAA in its meeting held on 30th August, 2017, informed that this project cannot be permitted due to GO no.95, 1996.

Thereafter, National Green Tribunal Principal bench, New Delhi heard our petition on 16th July 2018 and directed MoEF to redress the grievances expressed in our representation.

(ii) The proposal is for expansion of production capacity from 3 TPM to 496.8 TPM of Bulk drugs manufacturing facility at Sy. No.10, IDA Gaddapotharam, Jinnaram Mandal, Sangareddy District by M/s Emmennar Pharma Private Limited.

(iii) The project proposal was considered by the Expert Appraisal Committee (industry-2) in its 16th meeting held during 20-21st February 2014 and recommended Terms of References (ToRs) for the project. The TOR has been issued by Ministry vide letter no. J- 11011/9/2014-IA II (I); dated 19th May 2014.

(iv) All products are listed at S. No. 5 (F) of Schedule of Environment Impact Assessment (EIA) Notification under category 'B' and are appraised at State Level by Expert Appraisal Committee (EAC). However, there being no SEAC/SEIAA in the State, hence, proposal appraised at central level.

(v) Existing land area is 8.5 Acres and the same land will be used for proposed expansion. Industry has already developed 35.3 % of Greenbelt in an area of 3.0 acres out of 8.5 acres of area of the project.

(vi) The estimated project cost is Rs. 24.94 crores including existing investment of Rs 9.94 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.0 crores and the recurring cost (operation and maintenance) will be about Rs. 75 lakhs per annum.

(vii) Total employment will be 150 persons as direct & 50 persons indirect for the proposed project. Industry proposes to allocate Rs. 30.0 lakhs @ of 5/2.5 % towards Corporate Social Responsibility.

(viii) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km from the project site. River / water body – is at a distance of 1.2 Km from the site.

(ix) Ambient air quality monitoring was carried out at 8 locations during March- June 2014 and submitted baseline data indicates that ranges of concentration of PM10 (42-89.6 µg/m3), PM2.5 (27.3-54.1 µg/m3), SO2 (4.6-15.18 µg/m3) and NO2 (10.2-20.36 µg/m3) respectively. AAQ modeling study for point source emissions indicated that the maximum incremental GLCs after the proposed project would be 3.65 µg/m3, 8.57 µg/m3 and 4.83 µg/m3 with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement 194.1 m3/day of which fresh water requirement of 121.0 m3/day and will be met from private tankers. Treated effluent of 73.1 KLD will be reused out of total effluent of 94.5 KLD which will be treated through Stripper, MEE and ATFD for high TDS Stream and Low TDS will be treated in Biological ETP followed by RO system. The plant will be based on Zero Liquid discharge system.

(xi) Power requirement after expansion will be 1070 KW including existing KVA and will be met from Telangana State Electricity Distribution company limited (TSSPDCL). Existing unit has 1 X 320 KVA DG Sets of capacity, additionally 1 x 750 KVADG sets are used as standby during power failure. Stack (height 6.3 m) will be provided as per CPCB norms to the proposed DG sets.

(xii) Existing unit has 3 TPH coal fired boiler. Additionally 10 TPH Coal fired boiler will be installed. Bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 115mg/Nm3) for the proposed boilers.

(xiii) Details of process emissions generation is 1066.0 kg/day which are scrubbed through double stage scrubbers.

S. No	Emissions	Qty Kgs/day	Control system
1	CO2	476.0	Safely let in to atmosphere
2	H2	22.0	
3	O2	568.0	
	Total	**1066.0**	

(xiii) Details of solid waste/ Hazardous waste generation and its management are as under:-

S. No	Description of Waste	HW Category No. as per rules	Unit	Quantities		Disposal Option
				Current	After Expansion	
Disposal option						
1.	Forced Evaporation Salts	34.3	TPM	4.05	228.9	TSDF, HWMP, Dundigal
2.	Process Inorganic Salts	28.1	TPM	Not specified	252.6	TSDF, HWMP, Dundigal
3.	ETP Sludge	34.3	TPM	Not specified	30.0	Cement Units/TSDF, HWMP, Dundigal
4	Process organic residues	28.3	TPM	Not specified	70.5	Cement Units/TSDF, HWMP
5	Spent Carbon	28.2	TPM	Not specified	4.5	Cement Units /TSDF, HWMP
6	Distillation Bottom Residue	36.4	TPM	Not specified	51.0	Cement Units/TSDF, HWMP, Dundigal
Wastes with recycling option						
7	Mixed Spent Solvents & Stripper Distillate	28.5	KLM	Not specified	40.0	Authorized recyclers
8	Detoxified Containers and Container Liners	33.3	Nos/Month	Not specified	500	After detoxification disposed to outside agencies
9	Used Oil/Waste Lubricating Oil	5.1	LPM	2.0	50.0	Agencies authorized by TSPCB
10	Spent Paraffin	--	TPM	Not specified	3.1	Send to authorized recyclers

11	Piperazine ML's	--	KLM	Not specified	307.7	Recovery within the premises and reuse
12	Used Lead Acid Batteries	--	Nos./annum	Not specified	10	Returned back to dealer/ Supplier
13	Boiler Fly Ash	--	TPD	2.9	9.5	Brick Manufacturers

(xiv) Public Hearing is exempted as the unit is located in Notified Industrial Estate.

(xv) National green Tribunal, principal bench, New Delhi- Appeal no. 81 of 2018. NGT has Directed MoEF to Consider the proposal vide order dated 16.7.2018.

(xvi) Following are the list of existing and proposed products:

Existing Product list:

S.No	Product Name	Quantity Kg/day
1	Sucralose	50.0
2	L- Ectoine	50.0

Proposed Products and their Capacities for EC

S.No	Name of the product	Production Capacity	
		TPM	TPD
1	Ciprofloxacin Hydrochloride	60.0	2.0
2	Tramadol Hydrochloride	90.0	3.0
3	Methyl Isothiocyanate	195.6	6.52
4	2-Nitro-1-(Methylamino)-1-(Methylthio)Ethane (NMSM)	90.0	3.0
5	Diethyl-D-Tartarate	33.75	1.125
6	Diethyl-1,3-Acetone dicarboxylic acid	27.3	0.91
7	R & D Activity	0.15	0.005
	TOTAL	**496.8 TPM**	**16.56 TPD**
	Bi-Products		
1	Sulphur	108.0	
2	60% Sulphuric acid	493.5	

42.5.8.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of bulk drug manufacturing unit from 3 to 496.8 TPM by M/s Emmennar Pharma Pvt Ltd in an area of 8.5 Acres at Survey No.110, IDA Gaddapotharam, Jinnaram Mandal, District Sangareddy (Telangana).

The project/activity is covered under category B of item 5 (f) 'Synthetic Organic Chemical Industry' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at State level.

Earlier, ToR was granted to the unit by the Ministry on 19th May, 2014 due to no State Expert Appraisal Committee/SEIAA at that stage. After constitution of SEAC/SEIAA in the State, the project was transferred to the State on 10th December, 2015. The proposal for EC was considered in the SEAC meeting held on 10th January, 2017 and a subcommittee was constituted for site inspection. The sub-committee of SEAC visited the unit and submitted their report dated on 1st March, 2017. SEAC again considered the proposal in the meeting held on 18th March, 2017 and recommended the proposal for EC. During processing, SEIAA raised some queries and asked SEAC for detailed examination. The project was again recommended by SEAC for grant of EC. However, SEIAA in its meeting held on 30th August, 2017, informed that the project could not be permitted due to GO no.95, 1996.

The National Green Tribunal, Principal Bench at New Delhi, vide order dated 16th July 2018 in Appeal No.81/2018 has directed the MoEF for redressal of grievances of the petitioner as stated in his representation dated 5th October, 2017 to the Ministry.

Public Hearing is exempted as the unit is located in Notified Industrial Estate.

Total water requirement is estimated to be 194.1 cum/day, out of which fresh water intake of 121 cum/day proposed to be met from met from private tankers.

Industrial effluent will be 94.5 cum/day, which will be treated through Stripper, MEE and ATFD for high TDS Stream and Low TDS will be treated in Biological ETP followed by RO system. Treated effluent of 73.1 KLD will be reused/recycled. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The existing products were not covered under the ambit of EIA Notification, 1994/2006, hence, prior EC is not required.

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.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *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.*
- *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* 121 cum/day *to be met from* private tankers*. Prior permission in this regard shall be obtained from the concerned regulatory authority.*
- *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.*
- *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*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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.*
- *Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.*
- *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 other processes.*
(iii) *Use of automated filling to minimize spillage.*
(iv) *Use of Close Feed system into batch reactors.*
(v) *Venting equipment through vapour recovery system.*
(vi) *Use of high pressure hoses for equipment clearing to reduce wastewater generation.*

- *The green belt of at least 5-10 m width 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.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*

- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*

42.6 Any Other

Agenda No.42.6.1

Expansion of Bulk Drug and Intermediates Manufacturing Unit at Sy No.238 (part) 239/A, 239/E, Village Dothigudem, Mandal Pochampally, District Nalgonda (Telangana) by M/s SVR Laboratories Pvt Ltd - For amendment in EC

[IA/TG/IND2/50585/2012, J-11011/7/2013-IA II (I)]

42.6.1.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 26th March, 2018 in favour of M/s SVR Laboratories Private Limited for the project 'Expansion of Bulk Drug (APIs) and Intermediates manufacturing Unit' located at Sy. No. 238 (part), 239/A, 239/E, Dothigudem Village, Pochampally (M), Yadadri Bhuvanagiri District (Telangana).

42.6.1.2 The project proponent has requested for amendment in the EC with the details are as under;

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised read as	Justification / reasons
1.	Page No. 3 Point No. 6: 4th line	The effluent 56 KLD will be segregated into low TDS and high TDS effluents. High COD/TDS stream shall be treated in a stripper followed by multiple effect evaporator (MEE) and agitated thin film dryer (ATFD). The condensate from stripper shall be sent to cement plants for co-incineration, while the condensate from MEE and ATFD will be mixed with low TDS/COD effluents to be treated in biological system. The salts from ATFD shall be sent to TSDF for disposal. The treated wastewater will be further subjected to tertiary treatment in	The effluent 56 KLD will be generated in Phase-I (35%) and Phase-II balance 65%. This effluent will be segregated into low TDS and high TDS effluents. Phase-I effluent shall be send to CETP-ZLD of IEISL Fabcity for further treatment based on Zero Liquid Discharge principle and get back the 90% of treated effluent from CETP-ZLD for reuse in Cooling towers. Phase-II will commence after completion of ETP-ZLD facility for 100% capacity along with	TSPCB issued common directions to about 10 industries to obtain membership with new CETP-ZLD established with a purpose to support the small scale industries in and around Nalgonda district, instead of installing a ZLD within the premises and hence the, ***"Industry proposes to send the segregated HTDS & LTDS pre-treated effluent to New CETP-ZLD of IEISL, Fab City for further treatment".***

		an industrial reverse osmosis (RO) Plant. The permeate from the RO will be reused for cooling tower and boiler makeup, while the reject shall be sent to MEE. The unit will be thus based on zero liquid discharge system.	MEE, ATFD etc., within the plant premises, the total water, fresh water and treated effluent recycled quantity requirement will be as per EC granted dated 26-03-2018. CETP-ZLD will be a standby option during the maintenance of in-house ETP-ZLD.	
2.	Page No. 4 Point No. 10 (iii)	As proposed, the existing 1 TPH and proposed 4 TPH boilers shall be used only as standby. Cyclone separator followed by bag filter shall be provided for the proposed 5 TPH, 4 TPH coal fired boilers and 4.0 Lac K.Cal thermic fluid heater.	As proposed, In Phase-1: 4 TPH Coal fired boiler will be installed and in Phase-2: 5 TPH and 4 lac K.Cal Thermic Fluid heater will be installed. After Phase-2: 5 TPH and 4 lac K.Cal Thermic Fluid heater will be in operation and 4 TPH coal fired boiler & existing 1 TPH coal fired boiler will be standby. Cyclone separator followed by bag filter shall be provided for the proposed 5 TPH, 4 TPH coal fired boilers and 4.0 Lac K.Cal thermic fluid heater.	

42.6.1.*3* *The EAC, after deliberations and especially in view of drug manufacturing units classified as grossly polluting units by CPCB, was not inclined to recommend the proposal for amendment in the environmental clearance dated 26th March, 2018. Instead, for the present, the Committee insisted for comments of CPCB/SPCB in this regard for further consideration of the proposal.*

The Committee also suggested that based on actual assessment of environmental concerns in the study area, adequacy and efficacy of the CETP and its operational status, the SPCB may allow consent to operate on case to case basis in consultation with the CPCB.

Agenda No.42.6.2

Expansion of APIs and API Intermediates manufacutring unit at survey no. 238, 239, 240 & 248, Dhotigudem (V), Pochampally (M), Nalgonda District (Telangana) by M/s Optimus Drugs Pvt Ltd - For amendment in EC

[IA/TG/IND2/29714/2015, J-11011/209/2015-IA II (I)]

42.6.2.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 7th March, 2017 in favour of M/s Optimus Drugs Private Limited for the project 'Proposed Expansion of Active Pharmaceutical Ingredients (APIs) and API intermediates manufacturing unit' located at Sy. No.238, 239, 240 & 248, Dhothigudem Village, Bhoodan Pochampally (M), Yadadri Bhuvangiri District (Telangana).

42.6.2.2 The project proponent has requested for amendment in the EC with the details are as under;

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised read as	Justification / reasons
1.	Page No. 6 Point No. 11: ***5th line to 8th line*** & Page No. 7 Specific Condition: Point No.vi, ***3rd line***	High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream will be treated in ETP followed by RO. No effluent will be discharged outside the plant premises.	High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream will be treated in ETP followed by RO. No effluent will be discharged outside the plant premises. As an additional option, during the maintenance of In-house ETP-ZLD, Industry shall send segregated HTDS & LTDS pretreated effluent to CETP-ZLD of IEISL, Fab City for further treatment for the maximum period of 15 days in a year and get back the 90% of treated effluent from CETP-ZLD for reuse in Utilities.	TSPCB had suggested the industry vide letter No. TSPCB/ NLG/HO/CFO/2018-4274 dated 21-03-2018 to get the EC amendment from MoEF&CC for additional option of effluent disposal to CETP-ZLD during the in-house ETP-ZLD maintenance
2.	Page No. 7 Specific Condition: Point No. xii	'Zero' effluent discharge shall be ensured	'Zero' effluent discharge shall be ensured and with an option of sending the segregated pretreated effluent to CETP-ZLD of IEISL fabcity during the maintenance of in-house ETP-ZLD for maximum of 15 days.	

42.6.2.3 *The EAC, after deliberations and especially in view of drug manufacturing units classified as grossly polluting units by CPCB, was not inclined to recommend the proposal for amendment in the environmental clearance dated 7th March, 2017. Instead, for the present, the Committee insisted for comments of CPCB/SPCB for further consideration of the proposal.*

The Committee also suggested that based on actual assessment of environmental concerns in the study area, adequacy and efficacy of the CETP and its operational status, the SPCB may allow consent to operate on case to case basis in consultation with the CPCB.

Agenda No.42.6.3

Expansion of Sugar Plant (5,500-11,000 TCD), Molasses based Distillery Unit (35 KLPD to 100 KLPD), ENA Plant (20 KLPD to 75 KLPD) and Co-generation Power Plant (39 MW to 64 MW), establishment of Ethanol Plant at BELLAD- BAGEWADI, Taluka Hukkeri, District Belgaum (Karnataka) by M/s Vishwaraj Sugar Industries Limited - For validity extension of Environmental Clearance

[IA/KA/IND/23377/1910, J-11011/453/2009-IA.II(I)]

42.6.3.1 The proposal is for extension of validity of environmental clearance granted by the Ministry vide letter dated 24th November, 2011 to the project 'Expansion of Sugar Plant (5,500-11,000 TCD), Molasses based Distillery Unit (35 KLPD to 100 KLPD), ENA Plant (20 KLPD to 75 KLPD) and Co-generation Power Plant (39 MW to 64 MW), establishment of Ethanol Plant 30 KLPD at Village Bellad-Bagewadi, Taluka Hukkeri, District Belgaum (Karnataka) in favour of M/s Vishwaraj Sugar and Steel Industries Limited, which was further amended on 10th September, 2013 for increase the boiler capacity from 100 to 150 TPH. The Ministry has also vide letter dated 10th September, 2013 transferred the environmental clearance dated 24th November, 2011 in the name of M/s Vishwaraj Sugar Industries Limited from M/s Vishwaraj Sugar and Steel Industries Limited.

42.6.3.2 The project proponent has requested for extension of validity of the EC for a further period of three years in view of their inability to implement the expansion project of distillery and co-generation power plant within the validity period of three years due to financial constraints.

42.6.3.3 *The EAC, after deliberations, recommended for extension of validity of the environmental clearance dated 24th November, 2011, for a period of three years i.e. till 24th November, 2021.*

Agenda No.42.6.4

Expansion of Grain based distillery from 100 KLD to 600 KLD and Co-generation Power Plant of 40 MW at Village-Mansoorwal, Tehsil-Zira, Faridkot Road, District Ferozepur, Punjab by M/s Malbros International Pvt Ltd

[IA/PB/IND2/30448/2006, J-11011/187/2006-IA II (I)]

42.6.4.1 The proposal is for amendment in the environmental clearance granted by the Ministry vide letter dated 15th January, 2018 in favour of M/s Malbros International Pvt Ltd to the project for expansion of Grain based distillery from 100 KLD to 600 KLD and co-generation Power Plant of 40 MW located at Village Mansoorwal, Tehsil Zira, Faridkot Road, District Ferozepur (Punjab).

42.6.4.2 The project proponent has requested for change in the EC with the details as under;

S. No.	Para of EC issued by MoEFCC	As per EC dated 15th January, 2018	Desired Change	Justification / Reason Remarks
1.	Para 2 - Unit with Capacity	Distillery - 500 KLPD Grain based (2 x 250 KLPD) Co-generation Power Plant - 40 MW (2 x 20 MW)	500 KLPD Grain/ Molasses based distillery <u>Phase-I</u> 250 KLPD grain based distillery & 20 MW co-generation power plant or 160 KLPD Molasses based distillery & 12 MW Co- generation power plant <u>Phase-II</u> 250 KLPD Grain based Distillery & 20 MW co-generation power plant	The proposed change has been sought due to the following:- Ample availability of Molasses in Punjab and as a whole in the country due to bumper crop of sugarcane. The current policy of Govt. of India permits the supply of Ethanol for Blending with fuel; it can be produced from molasses / Grain. The cost economics of production also supports the proposal for manufacturing of ethanol from molasses.
2.	Para 4 - Raw material	The raw material for the production shall be grains (damaged grain feed stock, nakku, kinki, sorghum, maize, bajra, barley, 1200-1300 TPD), which shall be obtained from nearby areas.	The raw material for the production shall be grains (damaged grain feed stock, nakku, kinki, sorghum, maize, bajra, barley) & molasses which shall be obtained from nearby areas.	Ample availability of Molasses in Punjab and as a whole in the country due to bumper crop of sugarcane.
3.	Para 5 - Fresh Water requirement	The total water requirement is estimated to be 10958 cum/ day. The treated effluent of 6848 cum/day is proposed to be recycled/ reused for different industrial operations, leaving the fresh water requirement for the proposed expansion limited to 4110 cum/day which is proposed to be met through Sirhind Canal	The total water requirement is estimated to be 10914 cum/ day. The treated effluent of 7402 cum/day is proposed to be recycled/ reused for different industrial operations, leaving the fresh water requirement for the proposed expansion limited to 3512 cum/day which is proposed to be met through Sirhind Canal	The fresh water requirement will be decreased by 598 KLPD due to 160 KLPD molasses operation. In place of total fresh water consumption 4110 KLPD for 500 KLPD grain based operation, will be reduced to 3512 KLPD during phase -I: 160 KLPD molasses and phase –II: 250 KLPD grain based operation.

		Water. Necessary permission to draw 2.5 cusecs (6000 cum/day) of water has been obtained from the concerned authority i.e. Sirhind Canal Circle, Ludhiana.	Water. Necessary permission to draw 2.5 cusecs (6000 cum/day) of water has been obtained from the concerned authority i.e. Sirhind Canal Circle, Ludhiana.	
4.	Para 6 - Spent Wash Treatment	Spent Wash will be taken through centrifuge decanters and thin slops from the decanter centrifuge will be partly recycled back to process (30-35 %) and partly taken to the Thin Slops Evaporation plant for concentration of remaining solids to form a syrup. This syrup will also be mixed into the wet cake coming out of centrifuge and forms part of cattle feed. Wet Cake/DWGS from decanter will be passed through steam tube bundle drier for drying into cake with 10-12% moisture (max.) to give higher shelf life. DDGS will be ideally used as cattle feed/ poultry feed/ etc. No effluent will be generated from the plant as the distillery is based on "Zero Effluent Discharge".	Molasses based operation Spent Wash treatment: Spent wash generated from the analyser column bottom during the operation will be concentrated in integrated & stand-alone Multi – Effect Evaporator (MEE) from initial 12% solid to 55% solid and transferred for complete incineration/Burning in a special boiler designed for spent wash. Called as incineration boiler. Hence, the complete spent wash will be concentrated & incinerated & no spent wash will be discharged.	The Grain & Molasses based distillery is /will be based on "Zero Liquid Discharge". During Molasses based operation Only 30% supporting fuel as Rice Husk/ Bagasse/Paddy/Coal will be used as to burn these spent wash quantity as to achieve ZLD concept. The water evaporated is partly taken to the process as recycle water and balance fed to ETP/STP to reuse after treatment as to achieve ZLD concept. There will be no DDGS production & total Concentrated spent wash from MEE will be fed into Incineration boiler to burn it as fuel.
5.	Para 7 - Power Requirement	The total power requirement for proposed project shall be 9.0 MW proposed to be sourced from 40 MW (2X20 MW) Co-generation Power plant & 3X 1000 KVA of DG set (for back up).	The total power requirement for proposed project shall be 9.0 MW proposed to be sourced from 32 MW (12 MW & 20 MW) Co- generation Power plant & 3X 1000 KVA of DG set (for back up).	The total capacity of cogeneration power plant reduced from 40 MW to 32 MW only during Molasses based operation.

6.	Para 8 - Boiler Details	Two biomass/ rice husk/ bagasse/paddy & wheat straw fired boilers of 100 TPH capacity each shall be installed. A stack of 63 m height equipped with Electrostatic Precipitator (ESP) shall be installed to encounter the emission from boiler stack. (2x100 TPH = 200 TPH)	65 TPH Incineration boiler with fuel as concentrated Spent wash 70% along with 30% Biomass shall be installed for Molasses based operation. A stack of 75 m height equipped with Electrostatic Precipitator (ESP) OR Bag Filter shall be installed to encounter the emission from boiler stack. The same boiler will be used for Phase-I ; 250 KLPD Grain operation also with Fuel as biomass/ rice husk/ Bagasse/paddy & wheat straw etc. as 100% . (Phase-I; 65 TPH + Phase-II; 100 TPH = TOTAL 165 TPH)	Total boiler capacity reduced from 200 TPH to 165 TPH, resulting in decrease of pollution load. Chimney height increase from 63 m to 75 m to achieve boiler emission within the approval level Concentrated spent wash from MEE will be fed into Incineration boiler to burn it as fuel along with biomass/ rice husk/ bagasse/ paddy & wheat straw.
7.	Para 12 - Expansion Capacity	Expansion of Grain based Distillery from 100 KLPD to 600 KLPD (by adding 2 units of 250 KLPD each in two phases as Unit II) and the expansion of Co-generation Power Plant by adding 40 MW (2X20 MW).	Expansion of Grain/ Molasses based Distillery from 100 KLPD to 600 KLPD in two phases Phase-I; 250 KLPD Grain based distillery with 20 MW Co-generation Power plant or 160 KLPD Molasses Based Distillery with 12 MW Co-generation Power Plant Phase-II; 250 KLPD Grain based distillery with 20 MW Co-generation Power Plant.	-

42.6.4.3 The project proponent has submitted application for approval of licence to import and store petroleum/ethanol, to O/o Chief Control of Explosives/ PESO vide letter dated 31st October, 2018.

42.6.4.4 *The EAC, after detailed deliberations and the justification given by the project proponent to facilitate operation of the distillery using molasses also, recommended for the*

proposed amendment in the environmental clearance dated 15th January, 2018. Accordingly, during Phase-I, the distillery may operate in the following manner:-

- *Existing 100 KLPD (Grain based) + Proposed 250 KLPD (Grain based)*
  OR
- *Existing 100 KLPD (Grain based) + Proposed 160 KLPD (Molasses based)*

In case of the later option i.e. to run the distillery of 160 KLPD on molasses, fresh water requirement shall be reduced from 4110 to 3512 cum/day, co-generation capacity from 20 MW to 12 MW and the incineration boiler capacity from 100 TPH to 65 TPH, and thus resulting lesser impact on the environmental parameters.

Day Three - 31st October, 2018

Agenda No.42.7.1

Proposed Expansion of Sugar Unit From 2500 TCD to 6000 TCD and Molasses based Distillery Unit from 30 KLPD to 55 KLPD at Pune (Maharashtra) by M/s Shreenath Mhaskoba Sakhar Karkhana Ltd - For Environment Clearance

[IA/MH/IND2/81299/2017, J-11011/189/2016-IA.II(I)]

42.7.1.1 The project proponent and the accredited Consultant M/s Vasantdada Sugar Institute, made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for expansion of Sugar unit from 2,500 TCD to 6,000 TCD and Molasses based distillery unit from 30 KLPD to 55 KLPD at Shreenathnagar, village Patethan P.O. Rahu, Taluka Daund, District Pune by M/s Shreenath Mhaskoba Sakhar Karkhana Ltd.

(ii) Standard Terms of Reference for the project was issued on 29th September 2017. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 2nd August 2018.The main issues raised during the public hearing are related to air pollution due top particulate matter.

(iii) The project activity is covered under Category 'A' of item 5(g) 'Distilleries' and 5(j) 'Sugar Industry' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

(iv) Earlier, the environmental clearance to the project was granted by the Ministry letter dated 15th December 2014 to the existing 30 KLPD distillery in project area of 109,819 m^2 in favour of M/s.Shreenath Mhaskoba Sakhar Karkhana Ltd.

(v) Existing land area is 109,819 m^2 (sugar- 6.6 acres or26469 m^2+ distillery- 20.84 acres or 83,350 m^2),additional 29,976 m^2(sugar 2.64 acres or 10576 m^2 + distillery 4.85 acres of 19400 m^2) land will be used for proposed expansion.

(vi) Industry has already developed 12 acres and will develop 2.5 acres of greenbelt in an area of 33 % i.e., 14.5 acresor 58,000 m^2 out of total area of the project.

(vii) The estimated project cost is Rs 5669.1 lakhs. Total capital cost earmarked towards environmental pollution control measures is Rs 403.9 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 204.05 lakhs per annum.

(viii) Total Employment will be 711 (existing 347 + proposed 364) persons as direct &approx4000 persons indirect afterexpansion. Industry proposes to allocate Rs. 283.75 lakhs of 5/2.5 % towards Corporate Social Responsibility.

(ix) There are no national parks, wildlife sanctuaries, Biosphere Reserves,Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Bhima River flows at a distance of 2.20 km in SE direction.

(x) Ambient air quality monitoring was carried out at 8 locations during 23rd October, 2017 to 4th January, 2018 and the baseline data indicates the ranges of concentrations as: PM_{10} (44.57 to 50.60 µg/m^3), $PM_{2.5}$ (22.27 to 28.85 µg/m^3), SO_2 (16.48 to 18.59 µg /m^3) and NO_2 (22.28 to 27.07 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.48 µg/m^3, 1.24µg/m^3 with respect to PM_{10}, and Sox. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 5143 m^3/day for sugar and 752 m^3/day for distillery comprising which includes fresh water requirement of 520 m^3/day (103 m^3/day for sugar and 417 m^3/day for distillery) which will be met from Bhima river. Approval for withdrawal of 0.16 MCM water from the Bhima river has been obtained from the State Water Resource Department vide their letter dated 1st October, 2014.

(xii) Effluent of 600 m^3/day (sugar unit) will be treated through activated sludge process and 440 m^3/day (spentwash from distillery) will be treated through bio-methanation followed by multi-effect evaporation followed by bio-composting. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 6.5 MW during season (sugar + distillery) and 1.5 MW during off season (distillery & miscellaneous) and will be met from in house STG of 10 MW capacity during season and in house STG of 3 MW capacity during off season or State power distribution corporation limited (Maharashtra SPDCL).

(xiv) Existing unit has 72 TPH& 32 TPH bagasse fired boilers. No additionally boiler willbe installed as existing boilers are adequate to generate required steam for project. If required, an independent 8 TPH biogas firedboiler will be used for distillery to meet off season steam requirement. Existing venture wet scrubber with a stack of height of 65 m willbe used for controlling the particulate emissions within the statutory limit of 150mg/Nm3 for the proposed boilers.

(xv) Details of Process emissions generation are as follows. Stack gas emissions are expected in the form of particulate matter (fly ash) @8.83 g/s. Sulphur content inbagasseis in trace. However, SO2 estimated due to use of biogas is 6.09 g/secondsat worst case scenario.

(xvi) Details of Solid waste/ Hazardous waste generation and its managementis as follows.

Solid waste generation and disposal: Sugar unit

S. No.	Waste	*Quantity (tons per season)*	Treatment	Disposal	Remark
1.	Sugar ETP Sludge	35	Disposal into land/soil	Sold to the member farmers/or used on own plot	Organic
2.	Ash	3,927	Mixed with bio-compost Disposal into	Used as manure/soil enriching material	Inorganic

			land/soil		
3	PMC	43,200	Composting	Soil conditioner	Organic
4.	Oil & Grease	4-5 KL	Remove by oil skimmer	Use for boiler	-

Solid waste generation and disposal: Distillery unit

S. No.	Waste	*Quantity (MT/Annum)*	Treatment	Disposal	Remark
1.	Yeast Sludge	50	Composting	Used as manure/soil enriching material	Organic
2.	Boiler Ash (off season of sugar)	157	---	Sold to the brick manufacturing unit	Inorganic
3.	Sludge from bio-digestors,	70-80	Mixed with bio-compost		
4.	Distillery CPU Sludge	20	Composting	Used as manure/soil enriching material	Organic
5.	Spent oil from DG set	0.1-0.2 KL	-	Spent oil will be burnt in boiler	-

(xvii) The details of products and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
A.	**Sugar Unit**			
1	White sugar	281.25	393.75	675 TPD
2	Bagasse	712.5	997.5	1710 TPD
3	Molasses	100	140	240 TPD
4	Pressmud	100	140	240 TPD
B.	**Distillery Unit**			
1	Rectified spirit & impure spirit (5%) or ENA& impure spirit (6%) or Fuel alcohol & impure spirit (5%)	30 KLPD	25 KLPD	55 KLPD
2	Fuel oil	60	50	110 LPD
3	Biogas	9,900	8,290	18,190 m^3/day
4	Compost	5700	4746.5	10,446.5 TPA

(xviii) A report on compliance status of conditions stipulated in the environment clearance dated 15th December, 2014 has been forwarded by the Regional Office of the MoEF&CC at Nagpur vide their letter dated 16th January, 2017.

42.7.1.2 During deliberations, the Committee noted following:

The proposal is for environmental clearance to the project for expansion of Sugar Plant from 2,500 TCD to 6,000 TCD and Molasses based distillery from 30 KLPD to 55 KLPD by M/s

Shreenath Mhaskoba Sakhar Karkhana Ltd in a total area of 139795 sqm (Sugar - 37045 m^2, Distillery - 102750 m^2) at Shreenathnagar, village Patethan, P.O. Rahu, Taluka Daund, District Pune (Maharashtra).

Standard Terms of Reference for the project was issued on 29th September 2017. Public hearing for the proposed project was conducted by the State Pollution Control Board on 2nd August 2018. The main issues raised during the public hearing are related to air pollution due top particulate matter.

The project/activity is covered under Category A of item 5(g) 'Distilleries' and 5(j) 'Sugar Industry' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

Total water requirement is 5143 m^3/day for sugar and 752 m^3/day for distillery, which includes fresh water requirement of 520 m^3/day (103 m^3/day for sugar and 417 m^3/day for distillery) which will be met from Bhima river. Approval for withdrawal of 0.16 MCM water from the Bhima river has been obtained from the State Water Resource Department vide their letter dated 1st October, 2014.

Effluent of 600 m^3/day (sugar unit) will be treated through activated sludge process and 440 m^3/day (spentwash from distillery) will be treated through bio-methanation followed by multi-effect evaporation followed by bio-composting. The plant will be based on Zero Liquid discharge system.

Existing unit has 72 TPH and 32 TPH bagasse fired boilers. No additional boiler will be installed as existing boilers are adequate to generate required steam for project. However, if need arises, an independent 8 TPH biogas fired boiler will be used for distillery to meet off season steam requirement. Existing venture wet scrubber with a stack of height of 65 m will be used for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3 for the proposed boilers.

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 duly addressed by the project proponent.

Earlier, environmental clearance for 30 KLPD distillery in an area of 109,819 sqm was granted by the Ministry letter dated 15th December 2014 in favour of M/s Shreenath Mhaskoba Sakhar Karkhana Ltd. A report on compliance status of conditions stipulated in the said environment clearance has been forwarded by the Regional Office of the MoEF&CC at Nagpur vide their letter dated 16th January, 2017, which was found to be satisfactory.

During the year 2015-16, Ethanol production is reported to be 42.4 KLD i.e. more than the approved capacity of 30 KLD, due to purity of molasses and higher efficiency of fermentation, resulting into minimal losses and higher recovery of the final product.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 5th January, 2018 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed 103 m^3/day for sugar plant and 417 m^3/day for distillery proposed to be met from Bhima river. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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.*
- *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.*
- *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.*
- *The company shall undertake waste minimization measures as below:-*
  (vii) Metering and control of quantities of active ingredients to minimize waste.
  (viii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  (ix) Use of automated filling to minimize spillage.
  (x) Use of Close Feed system into batch reactors.
  (xi) Venting equipment through vapour recovery system.
  (xii) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 1% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be*

transmitted to the CPCB and SPCB server. 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.

- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.7.2

Expansion of Molasses Based Distillery (45 to 75 KLPD) & Co-generation Power Plant along with of 125 KLPD Grain Based Distillery in Existing Distillery at Gopalganj (Bihar) by M/s Sona Sati Organics Private Limited - For Environmental Clearance

[IA/BR/IND2/42658/2004, J-11011/25/2007- 1A II (I)]

42.7.2.1 The project proponent and the accredited Consultant J M EnviroNet Private Ltd made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project Expansion of existing molasses based distillery (45 to 75 KLPD) & co-generation power plant (1.0 to 5.0 MW) along with the installation of 125 KLPD grain based distillery in existing distillery plant premises at Village Rajapatti Kothi, P.O. Rajapatti, Tehsil Baikunthpur, District Gopalganj (Bihar) by M/s Sona Sati Organics Pvt. Ltd.

(ii) Standard Terms of Reference for the project was issued on 11th May, 2016. Public Hearing for the project was conducted by the Bihar State Pollution Control Board on 6th August, 2018. The main issues raised during the public hearing are related to activities to be undertaken under ESC, odour problems, noise pollution and electricity distribution.

(iii) 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 at Central level by the sectoral EAC in the Ministry.

(iv) Earlier, the project was granted environmental clearance by the Ministry vide letter dated 8th June, 2007 in favour of M/s Sona Sati Organics Private Limited for setting up molasses based distillery of 45 KLPD. The said EC was amended on 13th April, 2009 to effect spentwash treatment employing incineration boilers and to allow its operation more than 300 days in a year.

(v) The company has existing total land area of 122700 m^2 (30 Acres). Out of 12.27 ha, the existing distillery is constructed in 80937.1 m^2 (20 acres).The proposed expansion will also be carried out in 80937.1 m^2 only, thus no additional land will be acquired for proposed expansion.

(vi) Industry has already developed greenbelt in an area of 33 % i.e. 27000 m^2 (2.7 Ha) out of total area of the distillery i.e. 80937.1 m^2 and same will be maintained.

(vii) Total cost for the expansion project is Rs. 125 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 25 Crores and the Recurring cost (operation and maintenance) will be about Rs.2 Crores per annum.

(viii) Total employment to be generated from the project will be 218 persons as direct and 145 persons indirect after expansion. Industry proposes to allocate Rs. 94 lakhs @ of 0.75 % towards Corporate Environment Responsibility as per latest circular of CER dated 1st May, 2018.

(ix) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Rivers/ water bodies are Seasonal Nala flowing at a distance of 0.7 km in West direction, Saran main canal flowing at a distance of 2.3 km in South, Ghoghri River is flowing at a distance of 3.3 km in WSW, Khar River is flowing at a distance of 4.2 km in SSE, Gandak River flowing at a distance of 5 km in ENE direction.

(x) Ambient air quality monitoring was carried out at 8 locations during March to May 2016 and the baseline data indicates the ranges of concentrations as: PM_{10} (58.1- 86.7µg/m^3), $PM_{2.5}$ (24.5 – 41.2 µg/m^3), SO_2 (5.1-12.5 µg/m^3) and NO_2 (13.7- 22.5µg/m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11µg/m^3, 4.05µg/m^3 and 1.61 µg/m^3 with respect to PM_{10}, SO_2 and NO_2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water input will be 4579 KLPD (For molasses and grain based distillery after expansion) of which fresh water requirement of 1700 m^3/day will be met from Ground water.

(xii) After expansion, effluent of 1334 KLD (688 KLD from molasses based operation and 646 KLD from grain based operation) quantity will be treated through CPU with two stage RO System and MEE plant completely and recycled & reused in plant itself. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 4.0 MW including existing 1.0 MW and will be met from proposed 5 MW Co-generation power plant. Existing unit has 1 DG set of 750 KVA capacity, additionally 3 DG sets of 62 KVA, 380 KVA & 1000 KVA capacity have been proposed to be installed after expansion to be used as standby during power failure. Stack height of 1000 KVA (15 m above roof level) will be provided as per CPCB norms to the proposed DG sets.

(xiv) Existing unit has 22 TPH concentrated spent wash/rice husk/bagasse fired boiler. Additionally 36 TPH rice husk/bagasse/coal/blended fuel fired boiler will be installed. For existing boiler wet scrubber (will be replaced by ESP after expansion) with a stack of height of 45m is installed and for proposed boiler electrostatic precipitator with a stack height of 51 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boilers.

(xv) Details of Process emissions generation and its management

Source	Emissions	Management
Boiler	Particulate matter, SO2, NOx	• Adequate stack height of 45 m and 51 m. • Electrostatic precipitator as air pollution control equipment.
Fermentation	Carbon dioxide	CO_2 will be collected through scrubbers and sold to authorized vendors.

(xvi) Details of Solid waste/ Hazardous waste generation and its management

• Concentrated spent wash from the molasses based operation is being/ will be burnt in the incinerator boiler along with auxiliary fuel.

- Solid waste from the grain based operation generally comprise of Fibres and proteins in the form of DDGS, which will be ideally used as cattle feed, poultry feed/ fisheries etc. Yeast sludge will be mixed with wet cake.
- Ash from the boiler is being/will be supplied to brick manufacturers or given to farmers for soil amelioration.
- ETP sludge is being/will be used as manure after sun drying.
- Used oil generated from the plant machinery/ gear boxes as hazardous waste is being /will be sold out to authorized recyclers.

(xvii) A report on compliance status of conditions stipulated in the environment clearance dated 8th June, 2007 read with amended EC dated 13th April, 2009 has been forwarded by the Regional Office of MoEF&CC at Ranchi vide their letter dated 9th February, 2017.

(xviii) No Litigation is pending against the proposal.

(xix) The details of products and capacity as under:

Units	Existing Capacity	Additional Capacity	Total Capacity After Expansion	Products	By product
Molasses Based Distillery (KLPD)	45	30	75	Ethanol	CO_2
Co-generation Power Plant (MW)	1	4	5	Power	-
Grain Based Distillery (KLPD)	Nil	125	125	Ethanol	DDGS, CO_2

42.7.2.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 45 to 75 KLPD & co-generation power plant from 1 to 5 MW, along with setting up 125 KLPD grain based distillery in an area of 80937.1 sqm (total land 12.27 ha) located at Village Rajapatti Kothi, P.O. Rajapatti, Tehsil Baikunthpur, District Gopalganj (Bihar) by M/s Sona Sati Organics Pvt Ltd. No additional land is required for the proposed expansion.

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 at Central level by the sectoral EAC in the Ministry.

Standard Terms of Reference for the project was issued on 11th May, 2016. Public Hearing for the project was conducted by the Bihar State Pollution Control Board on 6th August, 2018. The main issues raised during the public hearing are related to activities to be undertaken under ESC, odour problems, noise pollution and electricity distribution.

Total water requirement will be 4579 KLPD (for molasses and grain based distillery after expansion) of which fresh water requirement of 1700 m^3/day will be met from Ground water. Permission for ground water withdrawal of 1800 cum/day has been obtained from the Central Ground Water Authority vide letter dated 31st May, 2018.

Effluent of 1334 KLD (688 KLD from molasses based operation and 646 KLD from grain based operation) to be generated after proposed expansion will be treated completely through CPU

with two stage RO System and MEE plant and recycled and reused in plant itself. The plant will be based on Zero Liquid discharge system.

Existing unit has 22 TPH concentrated spent wash/rice husk/bagasse fired boiler. To cater to the proposed expansion, one more boiler (rice husk/bagasse/coal/blended fuel fired) of 36 TPH shall be installed with electrostatic precipitator and stack of 51 m to control particulate emissions within the statutory limit of 50 mg/Nm^3.

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 duly addressed by the project proponent.

Earlier, the project was granted environmental clearance by the Ministry vide letter dated 8th June, 2007 in favour of M/s Sona Sati Organics Private Limited for setting up molasses based distillery of 45 KLPD. The said EC was amended on 13th April, 2009 to effect spentwash treatment employing incineration boilers and to allow its operation more than 300 days in a year.

A report on compliance status of conditions stipulated in the environment clearance dated 8th June, 2007 read with amended EC dated 13th April, 2009 has been forwarded by the Regional Office of MoEF&CC at Ranchi vide their letter dated 9th February, 2017. The same was found to be satisfactory.

Consent to Operate for the present industrial operations has been obtained from the State Pollution Control Board 26th October, 2018, which is valid up to 30th September, 2023.

PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 15th December, 2016 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed* 1700 m^3/day *proposed to be met from* ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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.*
- *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.*

- *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.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*
- *At least 0.75% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.7.3

Proposed 45 KLPD Molasses based Distillery Unit at Gat No. 141, 142, 143, Dharikheda village, P.O. Timbi, Taluka Rajpipla Nandod, District Narmada (Gujarat) by M/s Shree Narmada Khand Udyog Sahakari Mandli Ltd - For Environmental Clearance Reg.

[IA/GJ/IND2/66997/2017, IA-J-11011/384/2017-IA-II(I)

42.7.3.1 The project proponent and the accredited consultant M/s SGM Corporate Consultants Private Ltd made a detailed presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance for the proposed 45 KLPD Molasses based distillery project by M/s Shree Narmada Khand Udyog Sahakari Mandli Ltd located at Village Dharikheda, Post Timbi, TalukaRajpipla (Nandod), District Narmada (Gujarat).

(ii) Standard Terms of Reference for the project was issued on 26th October, 2017. Public Hearing for the proposed distillery project has been conducted by the State Pollution Control Board on 20th July 2018. The main issues raised during the public hearing are related to employment and benefit to farmers.

(iii) 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 at Central level by the sectoral EAC in the Ministry.

(iv) Existing land area available with sugar complex is 437060 m^2, out of which only 59520.3 m^2 of land is required for proposed distillery unit comprising of components viz. distillery biogas, concentration, CPU and Composting unit. Land is already in possession of industry.

(v) Approximately, 33.62 % of total plot area i.e. 146954 m^2 will be developed as green belt. Currently, 70,000 m^2 of land has been already developed as green belt area.

(vi) The estimated project cost of proposed distillery project is Rs.50.0484 Crore excluding the existing investment of Rs.186.6426500/- Crore for sugar and Co-Gen Power Plant. Total capital cost earmarked towards environmental pollution control measures for distillery project is Rs.14.1025 Crore and the recurring cost (operation and maintenance) will be about Rs 1.106 crore per annum.

(vii) Total Employment generation due to proposed distillery project will be 83 persons as direct and 40 persons as indirect. Industry proposes to allocate Rs. 149.75 Lacs @ of 3 % towards Corporate Social Responsibility.

(viii) There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site. River Narmada flows at a distance of 7.50 Km in north direction and Karjan River flows at a distance of about 10 Km in east direction.

(ix) Ambient air quality monitoring was carried out at 8 locations during October 2017 to December 2017 and the baseline data indicates the ranges of concentrations as: PM_{10} (40. 90 to 81.2 µg/m^3), $PM_{2.5}$ (15.54 to 33.97 µg/m^3), SO_2 (5.03 to 10.56 µg/m^3) and NOx (8.82 to 19.08 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.38 µg/m^3, 4.06 µg/m^3 and 7.22 µg/m^3 with respect to PM_{10}, SO_2 and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(x) Total water requirement for proposed distillery project is 1486 m3/day of which fresh water requirement of 324 m^3/day and will be met from the existing bore well.

(xi) Liquid streams of 515 CMD from proposed distillery project will be treated through Condensate Polishing Unit (CPU) and Spent wash of 482 TPD will be treated as- biomethanation followed by concentration of biomethanated spentwash with integrated

evaporation and standalone evaporation system to concentrate biomethanated spent wash (6% to 30%, i.e. from 482 TPD to 96 TPD) followed by composting system. The plant will be based on Zero Liquid discharge system.

(xii) Power requirement for proposed distillery project will be 825 KWH & for existing sugar & Co-gen is 6,000 KWH which will be met from existing captive power plant of 9 MW during season whereas during off season, one of the bagasse based boiler (35 TPH) will be used to generate steam for the production of fuel ethanol or power will be taken from State power distribution corporation limited (SPDCL).

(xiii) Existing sugar & co-gen unit has 1 No. of DG set of 320 KVA capacity, additionally 1 No. of DG set of 600 KVA for proposed distillery project will be used as standby during power failure. Stack (height 4 m) will be provided as per CPCB norms to the proposed DG set.

(xiv) Existing sugar unit has 3 No. of (2 x 35 TPH & 1 x 65 TPH) bagasse fired boilers.

(xv) Details of process emissions generation and its management is given in below table:-

S. No.	Stack Attached to	Stack Height	Air Pollution Control Equipment
1	Existing Boiler I-35 TPH	46 m	For boiler No. 1 & 2 MCS & Fly ash arrester was attached. But, now it has been replaced by Ventury type wet scrubber which will be put into operation from crushing season 2018 -19.
2	Existing Boiler II-35 TPH		
3	Existing Boiler III-65 TPH	60 m	Wet Scrubber
4	Existing DG Set of 320 KVA	4 m	Adequate stack height
5	Proposed DG set of 600 KVA	4 m	Adequate stack height

(xvi) Details of Solid waste/ Hazardous waste generation and its management

Details of Non Hazardous Solid Waste					
S. No.	**Unit**	**Waste & Quantity, TPD**		**Treatment**	**Disposal**
1	Molasses based Distillery (45KLPD)	Yeast sludge	15	Compost	Factory farm
		CPU Sludge	0.25	Compost	Own garden
		Boiler Ash from existing sugar unit - As a soil conditioner to member farmers			
2	Canteen	1.0		Compost	Own Garden
3	Colony	2.0		Compost	Factory farm
4	Office	Waste Papers	0.50	Sale	Non-Hazardous
5	Packing section	Waste papers	0.50	Sale	Non-Hazardous

(xvii) Hazardous waste - The number of barrels containing Turkey Red Oil/Antifoam is only few, as the substance is not a raw material. It is merely an anti-foam agent. These are on returnable basis to suppliers. So, also can be said for the yeast supplement substances, like nutrients, which comes in bags only.

(xviii) Status of Litigation Pending against the proposal, if any.- Not applicable.

(xix) The details of products and capacity as under:

S. No.	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
A.	**Molasses based Distillery Unit**			
1	Rectified Spirit / Fuel alcohol	0	115.43 /	115.43 /

	production (Lac lit/annum)		109.93	109.93
2	Impure spirit (Lac lit/annum)	0	6.08	6.08
3	Fusel Oil (lit/annum)	0	24300	24300
B.	**Biomethanation Unit**			
1	Biogas (m3/day)	0	20365	20365
C.	**Bio-composting Unit**			
1.	Biocompost (TPA)	0	19141	19141
Total		--	--	--

42.7.3.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up 45 KLD Molasses based distillery in an area of 437060 m^2 by M/s Shree Narmada Khand Udyog Sahakari Mandli Ltd located at Village Dharikheda, P.O. Timbi, Taluka Rajpipla (Nanded), District Narmada (Gujarat).

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 at Central level by the sectoral EAC in the Ministry.

Standard Terms of Reference for the project was issued on 26th October, 2017. Public Hearing for the proposed distillery project has been conducted by the State Pollution Control Board on 20th July 2018. The main issues raised during the public hearing are related to employment and benefit to farmers.

Total water requirement for proposed distillery project is 1486 cum/day of which fresh water requirement of 324 cum/day and will be met from the existing bore well.

Effluents of 515 cum/day generated from the proposed distillery project will be treated through Condensate Polishing Unit (CPU) and spent wash of 482 TPD will be sent for bio-methanation followed by concentration of bio-methanated spent wash with integrated evaporation and standalone evaporation system to further concentrate the spent wash (6% to 30%, i.e. from 482 TPD to 96 TPD) followed by composting system. The plant will be based on Zero Liquid discharge system.

42.7.3.3 *The EAC, after deliberations, desired for clarifications/inputs in respect of the following:-*

- *Approval by PESO for the site and layout plan for Ethanol storage facilities from safety considerations.*
- *Revised water balance and permission for withdrawal of ground water.*

The proposal was deferred for the needful on the above lines.

Agenda No.42.7.4

Expansion Project of 100 KLPD to 250 KLPD Molasses based Distillery Plant and additional 5 MW of power cogeneration at Plot No-755/1, Village Asmoli, Tehsil & District Sambhal (UP) by M/s Dhampur Sugar Mills Ltd - For Environmental Clearance

[IA/UP/IND2/30759/2006, J -11011/224/2007-IA-II(I)]

42.7.4.1 The project proponent and the accredited Consultant M/s Enviro Infra Solutions Pvt Ltd, Ghaziabad made a detailed Presentation on the salient features of the project and informed that:

(i) The proposal is for environmental clearance to the project for expansion from 100 KLPD to 250 KLPD Molasses based Distillery Plant and additional 5.0 MW (3.5 Existing) of Power Cogeneration Plant at village Asmoli, Tehsil & District Sambhal (Uttar Pradesh) by M/s Dhampur Sugar Mills Limited, Dhampur, Chemical Division.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 3rd meeting held during 18th -19th January 2016 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter No. J -11011/239/2015-IA-II(I) dated 05.03.2016.

(iii) All projects related to Distilleries are listed at S.N. 5(g) Distilleries of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry had issued EC earlier vide letter no. J-11011/224/2007-IA II(I) dated 17-07-2007 to the proposed project of 100 KLPD Molasses based Distillery unit at village Asmoli, Tehsil and District Sambhal, Uttar Pradesh by M/s. M/S Dhampur Sugar Mills Limited, Dhampur, Chemical Division.

(v) Existing land area is 80900 m^2. No additional land will be required for the proposed expansion.

(vi) Industry has already developed greenbelt in an area of 33 % i.e., 27900 m^2 out of total area of the project.

(vii) The estimated project cost is Rs.149.65 (in crores). Total capital cost earmarked towards environmental pollution control measures is Rs.70.13 crores and the Recurring cost (operation and maintenance) will be about Rs.2.75 crores per annum.

(viii) Total Employment will be 150 persons as direct & 100 persons indirect after expansion. Industry proposes to allocate Rs. 80 Lakhs @ of 1 % towards Corporate Social Responsibility.

(ix) There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

(x) Ambient air quality monitoring was carried out at 08 locations during 01-10-2017 to 31-12-2017 and the baseline data indicates the ranges of concentrations as: PM10 (88.2- 64.9 µg/m^3), PM2.5 (46.8 – 31.2 µg/ m^3), SO2 (13.2 – 9.2 µg/ m^3), NOX (18.4 – 16.2 µg/ m^3)and CO (1286 – 475 µg/ m^3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs at Tandakothi after the proposed project would be 80.0 µg/ m^3, 11.0 µg/ m^3 and 14.2 µg/ m^3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 4050 m3/day of which fresh water requirement of 2250 m3/day will be met from ground water.

(xii) Effluent of 1800 KLD quantity will be treated through ETP and slope boiler. The plant will be based on Zero Liquid discharge system.

(xiii) Power requirement after expansion will be 8500 KVA including existing 3500 KVA and will be met from captive power plant.

(xiv) Existing unit has 35 TPH incinerator fired boiler. Additionally, 50 TPH incinerator fired boiler will be installed. Bag filter with a stack of height of 60 m will be installed for controlling the particulate emissions within the statutory limit of 50 mg/Nm^3 for the proposed boilers.

(xv) Details of Process emissions generation and its management is given below in table:

S.No.	Item	Capacity	Process	Emission
1	Air pollution	50 TPH	Boiler	50 mg/Nm3

(xvi) Details of Solid waste/ Hazardous waste generation and its management is given below in table

Solid Waste Generation & Management:					
S. No.	**Item**	**Quantity Per Annum**	**Distance from Site**	**Mode of Transport**	**Mode of Disposal**
1	Solid waste	600 MT/dayyeast sludge 50MT/day ,furnace ash	500 meter	Road	Yeast sludge in boiler & furnace ash as manure/brick making
2	Hazardous waste	2.0 KL/year	At site	Road	It will be stored on site and sold to authorized recyclers

(xvii) Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 26th May, 2018. The main issues raised during the public hearing are the following:-

1. What benefits will common people get due to expansion of distillery plant?
2. Will there be any discharge of polluted/waste water from the distillery?
3. Will there be any emission of dangerous gas in the atmosphere from the distillery?
4. How many people will be required in the distillery plant?

(xviii) Details of Certified compliance report submitted by RO, MoEF&CC.

Details of certified report on compliance of earlier environmental clearance conditions			
1.	Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on compliance of earlier environmental clearance conditions obtained.		MoEFCC, Regional office, KendriyaBhawan, Fifth Floor ,Sector-H, Aliganj, Lucknow.
2.	Letter No		VII/ENV/UP/Ind-102/277/2008
3.	Status of Compliance		Done

4.	Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report) (*Upload pdf only*)		Yes
5.	Date of site visit		June, 2018

(xix) Status of Litigation Pending against the proposal, if any. – NO

(xx) The details of products and capacity as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1	Distillery Plant	100 KLD	150 KLD	250 KLD
2	Power Plant	3.5 MW	5.0 MW	8.5 MW

42.7.4.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of molasses based distillery from 100 KLPD to 250 KLPD and cogeneration power plant from 3.5 MW to 8.5 MW by M/s Dhampur Sugar Mills Limited, Dhampur, Chemical Division in an area of 80900 m^2 located at village Asmoli, Tehsil and District Sambhal (Uttar Pradesh).

The project/activity is covered under category A of item 5 (g) 'Distilleries' and item 1(d) 'Thermal Power Plants' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

ToR for the project was granted by the Ministry vide letter dated 5th March, 2016. Public Hearing for the proposed project was conducted by the State Pollution Control Board on 26th May, 2018. Major issues raised during the public hearing include benefits of the project to common man, disposal of effluents from the plant, emission of dangerous gases, number of persons to be required for the distillery plant.

Total water requirement is 4050 m^3/day of which fresh water requirement of 2250 m^3/day will be met from ground water. Approval from the Central Ground Water Authority has been obtained vide their letter dated 10th June, 2016 for withdrawal of 1000 KLD through existing tube well. Application for withdrawal for additional 1250 KLD of ground water is under consideration of the Central Ground Water Authority. The fresh water requirement is proposed to be reduced to 2000 cum/day i.e. 8KL/KL of Ethanol production.

Spent wash of 2110 cum/day quantity will be treated through MEE and slope boiler. Part of the condensate will be used in the process for molasses dilution and the remaining after treatment will be reused in cooling towers. Other effluents from the process of 85 cum/day will be treated and reused in process/green belt development, and thus the plant will be achieving Zero Liquid discharge system.
Existing unit has 35 TPH incineration boiler. One more boiler of 50 TPH incineration boiler shall be installed with bag filter and a stack of height of 60 m to control the particulate emissions within the statutory limit of 50 mg/Nm^3.

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 duly addressed by the project proponent.

Earlier, the project was granted environmental clearance by the Ministry vide letter dated 17th July, 2007 for 100 KLPD Molasses based Distillery at village Asmoli, Tehsil and District Sambhal (UP) by M/s Dhampur Sugar Mills Limited, Dhampur, Chemical Division. A report on compliance status of conditions stipulated in the environment clearance dated 17th July, 2017 has been forwarded by the Regional Office of MoEF&CC at Lucknow vide their letter dated June, 2018, which was found to be satisfactory.

Consent to Operate has been obtained from the State Pollution Control Board on 27th December, 2017 and is valid till 31st December, 2019.
PESO has given approval for the site and layout plan of storage facilities (Petroleum storage Class A installation) vide letter dated 15th June, 2016 to enable the mandatory licence in Form XV as per the Petroleum Rules, 2002.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Total fresh water requirement shall not exceed 2000 cum/day proposed to be met from* ground water*. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.*
- *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.*
- *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.*
- *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.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *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.*
- *All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.*

- *At least 0.75% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *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.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *CO_2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.*
- *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.*

Agenda No.42.7.5

Setting up of Polyester Granules, Polyester Filament Yarn from PET Granules and Polyester Texturized Yarn from POY/FDY at Survey No.196, 206, 207/1 & 208/1-2Industrial Zone, Village Velugam, Silvassa, UT of Dadar & Nagar Haveli by M/s Dodhia Synthetics Ltd - For Environmental Clearance

[IA/DN/IND2/53616/2016, J-11011/146/2016- IA II(I)]

42.7.5.1 The project proponent and the accredited Consultant M/s Unistar Environment and Research Labs Pvt Ltd, Vapi, made a detailed Presentation on salient features of the project and informed that:

(i) The proposal is for environmental clearance to setup Manmade Fibers (other than Rayon) manufacturing unit at Survey no. 196, 206,207/1 & 208/1-2, Industrial Zone, Village-Velugam, Silvassa, U.T. of Dadra and Nagar Haveli -396230 by M/s Dodhia Synthetics Ltd.

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 9th EAC meeting held during 27th-28th June 2016 and recommended Terms of References (TORs) for the project. The TOR has been issued by Ministry vide letter no. J-11011/146/2016/IA II (I) dated 02nd August 2016. Subsequently, Project Proponent had requested for amendment in the TOR's for exemption of public hearing on 03/12/2016 and it was considered by the Expert Appraisal Committee (Industry-2) in its 18th EAC meeting held during 23rd to 25th January 2017 and issued amended ToR Letter on 27th April 2017.

(iii) The manufacturing of "Polyester (PET) granules" from recycled PET scrap bottles is a mechanical process which does not involve any chemical reaction; and it is not listed under any activity in terms of the schedule to EIA Notification, 2006 and amended therein. Hence, prior environmental clearance is not applicable to this activity. All activities other than this, are listed at S. N. 5(d) – Manmade Fiber- Other than rayon of Schedule of Environmental Impact Assessment (EIA) Notification Under category 'B' but are appraised as Category-A at Central Level by Expert Appraisal Committee (EAC) due to applicability of General condition.

(iv) The proposed project will be established in a land area of 36223.00 m^2.

(v) Industry will develop greenbelt in area of more than 33% i.e.11975 sqm out of 36223 sqm of the project area.

(vi) The estimated project cost for the proposed project is Rs 244.97 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 5.00 Crores and the Recurring cost (operation and maintenance) will be about Rs. 50 Lakhs/Annum

(vii) Total Employment will be 515 persons as direct & considerable number of persons as indirect due to the proposed project. Industry proposes to allocate Rs. 367.45 Lakhs @ of 1.5% of capital investment towards Corporate Environment Responsibility (CER).

(viii) There are Patches of Reserved forests - 2.78 km N, Vasona Lion safari - 9.0 km NE, Satmalia Deer Park – 6.00 km NE, DNH Wild Life Sanctuary (~1.10 Km W) lies within 10 km distance. River/water body Apti river, Kurze Dam, Damanganga, DongarKhadi River, Sakartod River, Darotha River are flowing at a distance of 0.13 (E), 5.30(SW), 9.98Km NE, 2.69 km E, 4.78 km NE, 5.90 Km NW respectively.

(ix) Ambient air quality monitoring was carried out at 8 Locations during October 2017 to December 2017 and submitted baseline data indicates that ranges of concentrations of PM10 (68.75 to 84.17 µg/m^3), PM2.5 16.58 to 31.08 µg/m^3), SO2 (13.73 to 20.17 µg/m^3) and NO2 (18.51 to 23.42 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.19 µg/m^3, 2.06 µg/m^3 and 9.27 µg/m^3 with respect to PM_{10}, SO_x and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards.

(x) Total water requirement is 3170.00 KL/day of which fresh water requirement of 1070.00 KL/day and will be met from DungarKhadi reservoir of check dam (Surface water source).

(xi) Industrial effluent from Process and allied activities, washings, scrubbing and cooling blow down @2053.00 KL/day will be treated through proposed Effluent Treatment Plant, and the treated effluent from ETP will be recycled back to process and cooling. The plant will be based on Zero Liquid discharge system.

(xii) Power requirement will be 20 MWH and will be met from Electricity Department Silvassa. The unit has proposed 3 Nos. of DG sets of capacity 500 KVA each, which will be used as standby during power failure. Stack (height- 11 m) will be provided as per CPCB norms to the proposed DG sets.

(xiii) The unit will install 2 Nos. of FO fired Steam boiler of capacity 4 T/hr each. Wet Scrubber is proposed as APCD with a stack of height of 30 m.

(xiv) There will be no process emission from the proposed project.

(xv) Details of Solid waste/Hazardous waste generation and its management.

Types of Waste & Category	Source of Generation	Proposed Quantity per Year	Method of Disposal
ETP waste (35.3)	From ETP	150.00 MT	Will be sent to TSDF
Plastic waste	From process	270.00 MT	Will be recycled back /sold to actual users as per Plastic wastes Rules-2016
Used oil (5.1)	From plant and machineries	100.00 Lit.	Will be sold to registered refiners
Empty Drums and containers (33.1)	From Raw material storage	54000 Nos.	Will be sold to authorized recycler/scrap dealer
Scrubbing media (35.1)	APCD- Wet Scrubber	2880 KL	Treated in ETP

(xvi) Public Hearing for the Proposed Project is exempted as per amended ToR letter issued by Ministry vide letter no. J- 11011/146/2016/IA II (I); dated: 27th April 2017.

(xvii) No Litigation is pending against the proposal.

(xviii) The details of products and capacity as under:

Sr. No.	Name of the Proposed Products	Quantity (in MT/Year)
Product which do not require Environmental Clearance		
1.	Polyester (PET) Granules (by recycling of PET Bottle scrap)	96000
Products requiring prior Environmental Clearance		
2.	Polyester Filament Yarn (POY/FDY/PSF) from PET Granules /chips	96000
3.	Polyester Textured Yarn from POY/FDY	88000

42.7.5.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for setting up Manmade Fibres manufacturing unit (Polyester Filament Yarn - 96000 TPA from PET granules, Polyester Textured Yarn - 88000 TPA) by M/s Dodhia Synthetics Ltd in an area of 36223 m^2 at Survey No.196, 206,207/1 & 208/1-2, Industrial Zone, Village Velugam, Silvassa, U.T. of Dadra and Nagar Haveli.

Manufacturing of Polyester granules from recycled PET scrap bottles does not involve any chemical reaction and not listed in the schedule to EIA Notification, 2006, and thus not requiring prior environmental clearance. Other products are covered under category B of item 5(d) 'Manmade Fibre (Other than rayon)' of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006, and thus requires appraisal/approval at the State level by the respective SEAC/SEIAA. However, due to applicability of general conditions, the project was appraised as Category A at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

The Terms of Reference to the project was granted by the Ministry vide letter dated 2nd August, 2016, which was amended on 27th April, 2017 exempting the project from public hearing.

Total water requirement is 3170 KLD of which fresh water requirement of 1070 KLD will be met from Dungar Khadi reservoir of check dam (Surface water source). Approval in this regard has been obtained from the State/UT Water Resource Department vide their letter dated 5th June, 2018.

Industrial effluent of 2053 KLD will be generated from the process and allied activities, washings, scrubbing and cooling tower blow down, which will be treated in the proposed Effluent Treatment Plant. Treated effluent will be recycled to meet process requirements, and no untreated/treated effluent shall be discharged outside the premises. The plant will be based on Zero Liquid discharge system.

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 duly addressed by the project proponent.

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

- *The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable. Grant of environmental clearance does not necessarily implies that Wildlife Clearance shall be granted to the project and that their proposals for Wildlife Clearance will be considered by the respective authorities on their merits and decision taken.*
- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *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.*
- *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.*
- *Solvent management, if any, 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 98% 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.*
- *Total fresh water requirement shall not exceed 1070 KLD proposed to be met from Irrigation canal/surface water. Prior permission in this regard shall be obtained from the concerned regulatory authority.*

- *Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.*
- *The storm water from the premises shall be collected and discharged through a separate conveyance system.*
- *Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.*
- *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.*
- *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.*
- *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 other processes.
  (iii) Use of automated filling to minimize spillage.
  (iv) Use of Close Feed system into batch reactors.
  (v) Venting equipment through vapour recovery system.
  (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- *The green belt of at least 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.*
- *At least 1.5% 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.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *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.*
- *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- *Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.*
- *Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. 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.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.*

Agenda No.42.7.6

Expansion of Agrochemical & Agrochemical Intermediate Products at plot no. 43/1, GIDC Dahej, Taluka Vagra, District Bharuch (Gujarat) by M/s Tagros Chemical India Ltd - For reconsideration of EC

[IA/GJ/IND2/52237/2016, F.No. J-11011/122/2016-IA-II(I)]

42.7.6.1 The project proponent and the accredited Consultant M/s Aqua-Air Environmental Engineers Pvt Ltd made a presentation on salient features of the project and informed that:

(i) The proposal is for proposed expansion of Pesticide Technicals & Intermediates at 1265 MT/Month to 2350 MT/Month by M/s Tagros Chemical India Ltd and located at Plot No.43/1, Dahej GIDC Industrial Estate, Village Dahej, Taluka Vagra, District Bharuch (Gujarat).

(ii) The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 8th EAC meeting held during 26-27 May, 2016 and recommended Terms of References (ToRs) for the Project. The ToR has been issued by Ministry vide letter No.J-11011/122/2016-IA.II (I); dated 15th July, 2016.

(iii) Project activity is covered under Category A of item 5(b) of the Schedule to the Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

(iv) Ministry has issued EC earlier vide letter no. J-11011/20/2012-IA II dated 6th March 2014 for Pesticide Manufacturing unit to M/s Tagros Chemical India Ltd.

(v) Existing land area is 71,359 m^2 and no additional land shall be required for the proposed expansion.

(vi) Industry has already developed greenbelt in an area of 33% i.e. 21,359 m^2 (30%) out of 71,359 m^2 of area of the project.

(vii) The estimated project cost is Rs. 164.81 crores including existing investment of Rs.92.42 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.15.07 crores (existing Rs.8.38 crores + additional Rs.6.69 crores) and the recurring cost (operation and maintenance) will be about Rs.9.3 crores per annum (existing Rs.5.7 crores per annum + additional Rs. 3.6 crores per annum).

(viii) Total employment will be 345 persons (145 - existing + 200 additional) including contract workers as direct and indirect after expansion. Industry proposes to allocate Rs 94.14 lakhs (approx.) in next 5 years @ of 5/2.5 % (1.3%) towards Corporate Social Responsibility.

(ix) No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.

(x) Ambient air quality monitoring was carried out at 9 locations during March, 2016 to May, 2016 and collected baseline data indicates that ranges of concentrations of PM_{10} (54-83 µg/m3), $PM_{2.5}$ (26-49 µg/m^3), SO_2 (7-24 µg/m^3) and NO_2 (9-31 µg/m^3) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07 µg/m^3, 0.12 µg/m^3 and 0.04 µg/m^3 with respect to PM_{10}, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

(xi) Total water requirement is 2353 m^3/day of which fresh water requirement of 1413 m^3/day and will be met from GIDC Water Supply.

(xii) Treated effluent of 1474 m^3/day shall be treated in ETP consisting of primary, secondary and tertiary treatment facility followed by MEE & RO Unit. Out of 1474 m^3/day of Effluent, 494 m^3/day Final Treated effluent shall be sent to GIDC effluent pipeline for final disposal into deep sea, 940 m^3/day treated effluent i.e. RO Permeate shall be recycled/reused & remaining 40 m^3/day treated effluent i.e. Steam Condensate shall be used for Floor Washing. Existing discharge to deep sea will be maintained i.e. 494 m^3/day and additional 980 m^3/day will be recycled/reused and maintained as ZLD.

(xiii) Power requirement will be increased from 4.5 MW to 5.5 MW and will be met from DGVCL. Existing unit has 3 Nos. DG sets of 2500 kVA, 1500 kVA & 1000 kVA capacity, additionally 2 Nos. DG Sets of Capacity 1500 kVA and 1000 kVA will be installed and used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms.

(xiv) Existing unit has 3 Nos. of 16 TPH & 2 Nos. of 10 TPH (1 Stand-by) Coal fired boiler. Multi cyclone separator/bag filter/ESP with a stack of height of 30 m will be installed to control the particulate emissions (within statutory norms). No additional boiler will be installed under proposed expansion.

(xv) Details of Process emissions generation and its management are as under:-

S. No.	Process Stack attached to	Height (m)	Diameter (m)	Air pollution control system	Pollutants
1	DVAC Manufacturing	15	0.15	Two stage water scrubber followed by alkali scrubber	SO_2, HCl
2	Permethrin & Delt amethrin Manufacturing	15	0.15	Two stage water scrubber	HCl
3	MPB Manufacturing	15	0.15	Two stage water scrubber followed by alkali scrubber	HCl, Cl_2, HBr
4	Metamitron Thiamethoxam, Carfentrazone &Sulfentrazone Manufacturing	15	0.15	Two stage water scrubber followed by alkali scrubber	SO_2, HCl, Cl_2

(xvi) Used Lube will be sold to GPCB Authorized Recyclers. Discarded Drums & Containers, Discarded Liners & Cardboards will be sent back to the supplier for reuse or sold to GPCB authorized vendor. Cotton wastes/raw dust/bag filters containing pesticides will be sent for co-processing at cement industry or common incineration facility. Expired pesticides will be sent to common incineration facility. Spent catalysts (Reney Nickel Catalyst) will be send back for regeneration or return to suppliers. Process/Distillation Residue will be sent for co-processing or sent to common incineration facility. ETP Sludge, MEE Salt, Spent carbon from ETP, Sludge from wet scrubber, Incineration ash will be sent to TSDF Site. Spent Ion Exchange Resins will be sent for regeneration or returned to supplier. Spent solvent is Collected, Stored, and Transported & Recovered within premises. Fly Ash (Coal Ash) will be Collected, Stored, Transported and Final Disposal at bricks manufacturers or common TSDF site.

(xvii) Public Hearing is exempted as per para 7(i) III stage (3) (i) (b) of EIA Notification, 2006.

(xviii) Certified compliance report on the status of conditions stipulated in the environmental clearance dated 6th March, 2014 was forwarded by the Regional Office of the MoEF&CC at Bhopal vide their letter dated 27th November, 2017.

(xix) No litigation is pending against the proposal.

(xx) Following are the list of existing and proposed products:

S. No.	Products	Existing Capacity (MTPM)	Proposed capacity (MTPM)	CAS Nos.	LD_{50} (mg/kg)
Pesticides & Pesticides Intermediates					
1	DV Acid Chloride	200	250	52314-67-7	4123
2	Carfentrazone	100	150	128621-72-7	>4000
3	Ethofumesate	50	100	26225-79-6	>8743
4	Metamitron	100	150	41394-05-2	>4000
5	Cypermethrin	150	200	52315-07-8	>2000
6	Permethrin	75	100	52645-53-1	430 to 4000
7	Alphamethrin	50	75	67375-30-8	>2000
8	Meta Phenoxy	200	250	39515-	1222

	Benzaldehyde			51-0	
9	Metaphenoxybenzyl Alcohol	100	100	13826-35-2	2040
10	RRCMA	30	30	59042-50-8	>2000
11	Dicamba	50	500	1918-00-9	>2740
12	Deltamethrin tech.	10	30	52918-63-5	>2000
13	Sulfentrazone	100	100	122836-35-5	>2855
14	Thiamethoxam	50	100	153719-23-4	>2000
15	Bio Pesticides	-	215	-	-
	Total	**1265**	**2350**		
Inorganic Products (not covered under EIA Notification, 2006)					
15	PAC/$AlCl_3$	572.50	656.75	1327-41-9	2000
16	Sodium Sulphite Powder	560.7	747.6	7757-83-7	820
17	NH_4Cl Powder	162.7	216.6	12125-02-9	1300
18	KCl Powder	124.4	137.5	7447-40-7	3020
	Total	**2685.3**	**4267.7**		
By products					
1	HCl Solution	606.51	606.51	7647-01-0	238-277
2	$Cu(OH)_2$ Powder	2.10	2.63	20427-59-2	200
3	Spent Acid	3333.7	7618	7664-93-9	2440
	Total	**3942.31**	**8227.14**		
4	D.G. Sets	2500 KVA x 1, 1500 KVA x 1, 1000 KVA x 1	2500 KVA x 1, 1500 KVA x 2 1000 x 2		

42.7.6.2 The proposal was earlier considered by the sectoral EAC in its meeting held during July 25-27, 2018, wherein the Committee recommended the project for grant of environmental clearance. However, during processing the case, discrepancy was observed in respect of LD_{50} values of the products namely, Cypermethrin and Alphamethrin, given in the EIA report and that informed to the EAC during presentation. As per the EIA report, LD_{50} values of the said products are 250 mg/kg and 50 mg/kg respectively, while during presentation, these were reported as >2000 mg/kg.

The project proponent has informed that LD_{50} values were reconfirmed from Journal/MSDS/Co-relating with the CAS numbers. Based on the confirmed data gathered/searched, following is the revised submission of LD_{50}

- Oral LD_{50} and Dermal LD_{50} of Cypermethrin are >355 mg/Kg & >2000 mg/Kg respectively.

- Oral LD_{50} and Dermal LD_{50} of Alphacypermethrin are >400 mg/Kg & >2000 mg/Kg respectively.
- Alphamethrin to be read as Alphacypermethrin.

42.7.6.3 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of agrochemical & agrochemical intermediate products from 1265 TPM to 2350 TPM (15 nos of products) by M/s Tagros Chemical India Ltd in a total area of 71,359 sqm at plot No.43/1, GIDC Dahej, Village Dahej, Taluka Vagra, District Bharuch (Gujarat). The product list still mentions 'Alphamethrin' as one of the compound [S. No.7 at para (xx) of item 42.7.6.1], which is not in line with the fresh submissions of the project proponent while clarifying LD_{50} values.

The proposed expansion also involves increase in production of inorganic compounds and by-products from 2685.3 TPM to 4267.7 TPM, and from 3942.31 TPM to 8227.14 TPM respectively.

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 15th July, 2016 with the exemption from public hearing under the provisions as per Para 7 Stage III. (3) (i) (b) of the EIA Notification, 2006, as plant is located in notified Industrial Estate.

Total water requirement is estimated to be 2353 cum/day, which includes fresh water demand of 1413 m3/day (from the present of 1029 cum/day) to be met from GIDC Water Supply.

Total effluent generation shall be increased from 920 cum/day to 1474 cum/day, which would be treated in the ETP followed by MEE & RO. The RO permeate of 940 cum/day and steam condensate of 40 cum/day will be recycled/reused, and the remaining treated effluent of 494 cum/day shall be sent to GIDC effluent pipeline for final disposal into deep sea.

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.

The Ministry had earlier issued EC vide letter dated 6th March 2014 in favour of M/s Tagros Chemical India Ltd for Pesticide manufacturing. The monitoring report on compliance status of the EC conditions, forwarded by the Regional office Bhopal vide letter dated 27th November, 2017, was found satisfactory.

Consent to Operate for the present industrial operations has been obtained from the State PCB vide letter dated 16th September, 2014, which is valid up to 14th February, 2019.

42.7.6.4 *The Committee, after deliberations, reiterated its earlier recommendations for grant of environmental clearance to the project, subject to compliance of same set of terms and conditions. Regarding name change of the products(s), the Committee asked for confirmation and to corroborate the same with that mentioned in the EIA report. The Committee further desired that the Ministry may ensure consistency in product details informed by the project proponent at all stages.*

Agenda No.42.7.7

Proposed Isolated Petroleum Storage Terminal at SIDCO Industrial Estate, Asanur village Tahsil Ulundurpet, District Villupuram (Tamil Nadu) by M/s Indian Oil Corporation Limited - For Environmental Clearance

42.7.7.1 The project proponent and the accredited Consultant M/s Ultra-Tech Environmental Consultancy and Laboratory, Thane made a detailed presentation on salient features of the project and informed that:

i. The proposal is for environmental clearance to the project "Proposed Greenfield Petroleum Storage Terminal with a capacity of 80,870 m^3 for Petroleum Products of MS, HSD, Bio-Diesel, Ethanol" by M/s. India Oil Corporation Limited located at SIDCO Industrial Estate, Asanur Village, Ulundurpet Taluka, Villupuram District, Tamil Nadu.

ii. The project proposal was considered by the State Expert Appraisal Committee (Tamil Nadu) in its 81st meeting held during 23rd September 2016 and recommended Terms of References (ToR) for the Project. The ToR has been issued by SEAC, Tamil Nadu vide letter No. SEIAA/E.No.5365/2016/6b/VPR/ToR-266/2016 dated 27th September 2016.

iii. All projects involving the "Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000) are listed at S.N. 6 (b) of Schedule of Environment Impact Assessment (EIA) Notification under category. The tenure of the SEAC/SEIAA of Tamil Nadu State has expired on 10th August 2018 and currently there is no duly constituted SEAC/SEIAA in Tamil Nadu. Hence, the case will be appraised at Central Level by Expert Appraisal Committee (EAC).

iv. Total proposed land area will be 301915.54 m^2.

v. Industry will develop green belt in an area of 33% i.e. 99632.13 m^2 out of total area of the project.

vi. The estimated proposed project cost is Rs. 406 crores. Total capital cost earmarked towards environmental pollution control measures is 71.47 crores and the Recurring cost (operation and maintenance) will be about 2.51 crores per annum.

vii. Total Employment will be 25 persons as direct and 60 persons indirect for the proposed project. Industry proposes to allocate Rs.831.71 Lakhs towards Corporate Enterprise Responsibility.

viii. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, etc within 10 km distance from the project site. River/Water bodies are Manimuktha river at distance of 2.2 km in South direction, Gomukhi river at distance of 3.18 km in South direction, Memathur canal at distance of 5.43 km in Southeast direction.

ix. Ambient air quality monitoring was carried out at 10 locations during April 2016 to June 2016 and the baseline data indicates the ranges of concentrations as: PM_{10} (30.2-67.2 µg/m^3), $PM_{2.5}$ (10.1-31.2 µg/m^3), SO_2 (BDL-12.8µg/m^3) and NO_x (9.9-20.1 µg/m^3). There is no manufacturing process involved at the project site as it is only storage & distribution of finished petroleum products. There will not be any addition of stack. So, there will not be any addition of pollutants in air hence, modeling is not essential.

x. Total water requirement is 20 m^3/day of which fresh water requirement of 20 m^3/day will be met from 3 bore wells (after obtaining necessary permission from CGWA).

xi. There will be no industrial effluent being generated from the project site. Sewage generated from domestic sources will be treated in 10 kLD STP. Mechanized Oil Water

Separator (OWS) will be provided. The water from OWS will be reused for gardening and dust suppression. The plant will be based on Zero Liquid discharge system.

xii. Power requirement for the proposed project 1250 kW and will be met from TNSEB (Tamil Nadu State Electricity Board). DG sets of capacity 2X750 kVA and 1X500 kVA are proposed for backup power. Stack (height 5.5m & 4.5m) will be provided as per CPCB norms to the proposed DG sets.

xiii. As the terminal is providing only storage and handling services, there is no generation of process emission.

xiv. Details of Solid waste/ Hazardous waste generation and its management:

Schedule I Category No. Type	Quantity	Method of Disposal
Category No. 34.3 Oil Water Sludge – generated from cleaning of storage tanks once in 5 years	5 MT per year (approximately)	CHWTSDF via authorized vendors.

xv. Public Hearing for the proposed project has been conducted by the Tamil Nadu Pollution Control Board (TNPCB) on 16th November 2016. No major issues were raised during the public hearing.

xvi. Status of Litigation Pending against the proposal, if any: No litigation is pending against the project.

xvii. The details of storage capacities of the proposed tanks are as under:

S. No.	Product	Class	No of tanks	Type of Tanks	Tank Size (dia x ht/length in m)	Capacity of each tank (m^3)	Total Tankage (m^3)
1.	MS	A	3	IFRVT	32 x 15	10,000	30,000
2.	MS (TTD)	A	1	UGHT	3 x 8	50	50
3.	HSD	B	3	CRVT	38 x 15	15,000	45,000
4.	HSD (TTD)	B	1	UGHT	3 x 8	50	50
5.	HSD (own use)	B	1	UGHT	2.5 x 6.5	20	20
6.	BIO-DIESEL	-	1	CRVT	12 x 14	1,500	1500
7.	BIO-DIESEL (TTD)	-	2	UGHT	3 x 10.5	70	140
8.	Ethanol	A	2	IFRVT	14 x 13.5	1,685	3,370
9.	Ethanol (TTD)	A	2	UGHT	3 x 10.5	70	140
10.	Sludge	-	1	AGHT	12 x 9	600	600
					CLASS – A	33,560	
					CLASS - B	45,070	
					Excluded product	2,240	
					GRAND TOTAL		**80,870**

42.7.7.2 During deliberations, the Committee noted the following:

The proposal is for environmental clearance to Greenfield Petroleum Storage Terminal of total capacity of 80,870 m^3 (17 nos of tanks) for storage of different petroleum products (MS, HSD, Bio-Diesel, Ethanol) by M/s India Oil Corporation Limited in an area of 301915.54 m^2 by located at SIDCO Industrial Estate, Asanur Village, Ulundurpet Taluka, Villupuram District, Tamil Nadu.

The project/activity is covered under category B of item 6 (b) 'Isolated storage & handling of hazardous chemicals' of the Schedule to the Environment Impact Assessment Notification, 2006, and thus requires appraisal/approval at the State level by the respective SEAC/SEIAA. However, due to SEIAA, Tamil Nadu not in existence, the project was appraised at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.

Total water requirement is 20 m^3/day of which will be met from 3 bore wells (after obtaining necessary permission from CGWA).

No industrial effluent will be generated from the project. Sewage generated from domestic sources will be treated in Sewage Treatment Plant of 10 kLD capacity. Mechanized Oil Water Separator (OWS) will be provided. Treated water will be reused for gardening and dust suppression. The plant will be based on Zero Liquid discharge system.

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 duly addressed by the project proponent.

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

- *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*
- *As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.*
- *Total fresh water requirement shall not exceed 20 m^3/day proposed to be met from ground water. Prior permission shall be obtained from the Central Ground Water Authority.*
- *Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.*
- *During construction phase, air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.*
- *The green belt of 5-10 m width 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 and in consultation with the State Forest Department.*
- *At least 0.75% 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.*
- *Regular monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data to be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.*
- *Necessary approvals from Chief Controller of Explosives, as applicable, shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.*
- *Emergency Response Plan should be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once a month.*

- *Additional safety measures should be taken by using remote operated shut off valve, Double Block &Bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.*
- *Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.*
- *Water sprinkling has to be undertaken on regular basis to control the polluting particles.*
- *Approach road shall be made pucca to minimize generation of suspended dust.*
- *The energy sources for lighting purposes shall preferably be LED based.*
- *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.*
- *Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month. onsite and off-site Disaster Management Plan shall be implemented.*
- *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.*
- *Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.*
- *High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.*
- *Unit should carry out safety audit and report submitted to the Regional Office. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.*

<u>Agenda No.42.8.1</u>

Expansion of Sugar Factory (7000 TCD to 10000 TCD), Distillery (60 KLPD to 90 KLPD) & Co-gen unit (28 MW to 38 MW) at Kagal Shrimant Jayshingrao Ghatge Bhavan, Kagal, Taluka Kagal, District Kolhapur (Maharashtra) by Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd - For Amendment in ToR

[IA/MH/IND2/76013/2018, J-11011/225/2015-IA II (I)]

42.8.1.1 The proposal is for amendment in Standard ToR granted by the Ministry vide letter dated 6th September, 2018 in favour of M/s SCSSSKL for expansion of Sugar Factory from 7000 TCD to 10000 TCD, Co-gen plant from 28 MW to 38 MW & Molasses based Distillery from 60 KLPD to 90 KLPD located at Kagal, Tal Kagal, District Kolhapur (Maharashtra).

42.8.1.2 The project proponent has requested for amendment in the ToR with the details as under:

S. No.	Para of ToR issued by MoEF&CC	Details as per the ToR	To be Revised/Read as	Justification /reasons
1.	Para 2 of Page no.2	In this regard, under the provisions of the EIA Notification 2006 as amended, 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 As follows:	In this regard, under the provisions of the EIA Notification 2006 as amended, 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 As follows:	Public Hearing for the project was conducted on 8th November, 2016. EIA reports for the expansion of Sugar Factory from 4950 To 7000 TCD, Co-gen form 12.5 MW to 28 MW & Molasses based Distillery unit from 45 KLPD to 60 KLPD were prepared based on baseline data collected for December 2015-January 2016 – February 2016 Validity of the same is for three years.

42.8.1.2 *The EAC, noted that public hearing was conducted on 8th November, 2016, for the project for expansion of Sugar Factory from 4950 to 7000 TCD, Co-gen form 12.5 MW to 28 MW & Molasses based Distillery unit from 45 KLPD to 60 KLPD by Shree Chhatrapati Shahu Sahakari Sakhar Karkhana Ltd at Village and Taluka Kagal, District Kolhapur (Maharashtra), for which environmental clearance was granted on 28th March, 2017 by the Ministry.*

The Committee after detailed deliberations, considering that the present proposal is expansion of the existing unit for which public hearing has been conducted, recommended for amendment in the Terms of Reference dated 6th September, 2018, with exemption from public hearing, as per para 7 (ii) of the EIA Notification, 2006.

Agenda No.42.8.2

Setting up of 160 KLD molasses based distillery (RS/ENA/AA) along with 8 MW of Co-Generation Power Plant at Village Nausar Gularia, Block Bijua, Tehsil Gola, District Lakhimpur Kheeri Uttar Pradesh, LakhimpurKheri (Uttar Pradesh) by M/s GULARIA CHINI MILLS - For amendment in ToR

[IA/UP/IND2/75830/2018, IA-J-11011/236/2018-IA-II(I)]

42.8.2.1 The proposal is for amendment in standard Terms of Reference granted by the Ministry vide letter dated 24th August, 2018 for the project for setting up 160 KLD (RS/ENA/AA), molasses/grain based distillery along with 8 MW of cogeneration Power Plant in favour of M/s Gularia Chini Mills (Distillery Unit) (A unit of Balrampur Chini Mills Limited), located at Village NausarGularia, Block Bijua, Tehsil Gola, District Lakhimpur Kheri (Uttar Pradesh).

42.8.2.2 The project proponent has requested for amendment in the ToR with the details as under:

S. No.	Para of ToR issued by MoEF&CC	Details as per the ToR	To be revised/ read as	Justification/ reasons
1	An amendment in TOR may kindly be made in point 2 **: Name of the Proposal:**	M/s Gularia Chini Mills (Distillery Unit) (A unit of Balrampur Chini Mills Limited) has proposed to establish a 160 KLD (RS/ENA/AA), molasses/grain based distillery along with 8.0 MW of Co- Generation Power Plant.	M/s Gularia Chini Mills Unit – Distillery (A unit of Balrampur Chini Mills Limited) has proposed to establish a 160 KLD (RS/ENA/AA) molasses based distillery along with 8 MW of Co-Generation Power Plant at village Rudrapur Gularia, Block Bijua, Tehsil Gola, District Lakhimpur Kheri (UP).	Unit has surplus molasses from own existing sugar units which will be used as raw material.

42.8.2.3 *The EAC, after detailed deliberations, recommended for amendment in standard Terms of Reference dated* 24th August, 2018 *as proposed by the project proponent i.e. for setting up 160 KLD distillery based on molasses only.*

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List of the Expert Appraisal Committee (EAC-Industry-2)

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Shri R K Singh	Member
3.	Dr. Ahmed Kamal	Member
4.	Dr Ajay Gairola	Member
5.	Prof. J.R. Mudakavi	Member
6.	Shri Sanjay Bist	Member
7.	Prof. (Dr.) Y.V. Rami Reddy	Member
8.	Shri S.K. Srivastava	Member Secretary