

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-3 SECTOR)**

Dated: 24.10.2024

**MINUTES OF THE 87th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING
FOR PROJECTS LISTED FROM “PARIVESH 1 PORTAL” HELD ON 21st October 2024**

Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 through Video Conferencing (VC)

Time: 10:30 AM onwards

(i) Opening Remarks by the Chairman

Prof. (Dr.) A.B. Pandit, Chairman welcomed the Committee members and opened the EAC meeting for further deliberations.

(ii) Details of Agenda items by the Member Secretary

The Member Secretary then apprised the Committee about the details of Agenda items to be discussed during this Expert Appraisal Committee (EAC) meeting.

(iii) Confirmation of Minutes of the 86th EAC Meeting held on 30th September & 1st October, 2024.

The EAC noted that the final minutes of the above meeting were issued after incorporating the comments offered by the members and approved by the Chairman.

PARIVESH 1 Portal

Agenda No. 87.1

Proposed expansion project for manufacturing of Marine Chemicals, Fertilizers and Captive Co-Gen Power Plant located at Greater Rann of Kutch, Nr. Village Dhordo, Tal: Bhuj, Dist. Kutch, Gujarat by M/s. Agrocel Industries Pvt. Ltd. - Consideration of Environmental Clearance

[Proposal no: IA/GJ/IND3/277411/2020, F.NO.: IA-J-11011/269/2020-IA-II(I)]

1. The proposal is for the environmental clearance Proposed expansion project for manufacturing of Marine Chemicals, Fertilizers and Captive Co-Gen Power Plant located at Greater Rann of Kutch, Nr. Village Dhordo, Tal: Bhuj, Dist. Kutch, Gujarat by M/s. Agrocel Industries Pvt. Ltd.
2. The project/activity is covered under Category ‘A’ of item 5 (a)- **Chemical fertilizers** of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended).
3. ToR letter was granted from MoEFCC vide File No. IA-J-11011/269/2020-IA-II(I) dated 07th November 2020. The PP reported that it is an **expansion case**. The proposal is placed in the 87th EAC meeting 21-22 October 2024. Project Proponent and an accredited Consultant, San Envirotech Pvt. Ltd.,

[Certificate No: NABET Accreditation Number - NABET/EIA/21-24/SA 0228, valid till 21.03.2025] made a detailed presentation on the salient features of the project and informed the following:

4. Total lease land area of the project is 27762.5 Acres (112350851.43 m²), out of which, 366650 m² land used for project activity and Rest of the land is for salt recovery given by the Government of Gujarat on lease base.
5. Unit is engaged in manufacturing of inorganic products - Marine Chemicals, so EC is not applicable to the existing unit. The details of products and capacity as under:

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	48% Hydrobromic Acid OR	4000	4333	8333.000	Others	MTP M	Road	
(2.)	Phosphorus Tribromide	15	10	25.000	Others	MTP M	Road	
(3.)	Zinc Bromide (77%) OR	80	1587	1667.000	Others	MTP M	Road	
(4.)	Lithium Bromide OR	00	1667	1667.000	Others	MTP M	Road	
(5.)	Potassium Schoenite (K ₂ SO ₄ .MgSO ₄ .6H ₂ O) OR	750	28833	29583.000	Others	MTP M	Road	
(6.)	Sulphate of Potash OR	00	29583	29583.000	Others	MTP M	Road	
(7.)	Potassium Nitrate OR	00	29583	29583.000	Others	MTP M	Road	
(8.)	Magnesium Hydroxide Mg (OH) ₂ OR	00	57633	57633.000	Others	MTP M	Road	
(9.)	Magnesium Oxide (MgO) OR	00	57633	57633.000	Others	MTP M	Road	
(10.)	Enriched Mineral Salt Mix	00	16667	16667.000	Others	MTP M	Road	
(11.)	Calcium Bromide (52%) / Solid Powder OR	4000	4333	8333.000	Others	MTP M	Road	
(12.)	Syngenite (K ₂ SO ₄ .CaSO ₄ .H ₂ O) OR	750	28833	29583.000	Others	MTP M	Road	

(13.)	Magnesium Sulphate (MgSO ₄) OR	00	29583	29583.000	Others	MTP M	Road	
(14.)	Sodium Bromide (45%) / Solid Powder OR	150	1517	1667.000	Others	MTP M	Road	
(15.)	Magnesium Chloride (MgCl ₂) OR	300	57333	57633.000	Others	MTP M	Road	
(16.)	Captive Co-Gen Power Plant (6.4 MW x 4 Nos.)	00	25.6	25.600	Mega Watt(MW)		Others	Captive
(17.)	Liquid Bromine OR	4000	4333	8333.000	Others	MTP M	Road	

6. The PP reported that there is no violation case as per the Notification No. S.O.804 (E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act
7. There are **no** national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Schedule-I Bird Species Peacock or Indian Peafowl (Pavo Cristatus) was recorded within the study area of 10 km radius. Conservation Plan for the same is attached in EIA/EMP report.
8. Ambient air quality monitoring was carried out at 8 locations during October 2020 – December 2020 and the baseline data indicates the ranges of concentrations as: PM10 (49-72 µg/m³), PM2.5 (10-19 µg/m³), SO₂ (06-16 µg/m³) and NO₂ (28-45 µg/m³). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
9. After expansion, total water consumption will be 26287 KLD (Fresh Water: 22378 KLD + Recycle water: 3909 KLD). Unit will satisfy its fresh water requirement from desalination of Sea water and rejected Brine water will be used as raw material for bromine recovery
10. After expansion, total industrial wastewater generation will be 460852 KLD, of which 3858 KLD will be close loop recycle. Hence actual w/w generation will be 456994 KLD. Domestic sewage generation will be 51 KLD. Entire effluent will be treated in to ETP (Neutralization and Settler). Effluent from ETP will sent to evaporation pan for recovery of mineral salt, which is one of the raw materials of the Inorganic Chemical and Inorganic Fertilizer products. Generated domestic sewage will be treated in STP and treated sewage will be reused in greenbelt.
11. Total power demand will be 92000 kVA, which is fulfilled by Paschim Gujarat Vij Company Ltd. (PGVCL) and Captive Power Plant of 25.6 MW. Unit also proposed to install stand by D.G. Sets (2102.5 kVA) to meet the power requirement in case of power failure from grid.
12. Details of process emissions from utilities:

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)
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(1.)	Boiler-1 (6 TPH)	Lignite/Imported Coal - 26.4 TPD	40	0.45
(2.)	Hot Air Generator-2 (4 lakh kcal/hr)	Wood / Lignite / Imported coal 7.2 TPD	51	1.2
(3.)	D.G Set 1, 2 & 3 (320, 200 & 82.5 kva) (Stand by)	HSD 245 lit/hr.	51	1.2
(4.)	Boiler-5 (45 TPH) salt based products)	Coal 197 TPD	51	1.2
(5.)	Boiler-7 (45 TPH) (salt based products)	Coal 197 TPD	15	0.3
(6.)	Boiler-8 (45 TPH) (salt based products)	Coal 197 TPD	24	0.3
(7.)	HAG-3 (non salt based products) (5 lakh kcal/hr.	Coal 2 TPD	24	0.3
(8.)	HAG-5 (salt based products) (50 lakh kcal/hr.)	Coal 26 TPD	30	0.6
(9.)	HAG-8 (salt based products) (50 Lakh kcal/hr.)	Coal 26TPD	12	0.3
(10.)	DG. SET 4,5&6 (500 kva x 3nos.)	Diesel 630 lit/he.	21	0.3

(1 1.)	Bromine Plant-1	--	20	0.3
(1 2.)	Bromine Stripping plant-6	--	20	0.3
(1 3.)	Bromine Stripping Plant-5	--	20	0.3
(1 4.)	Bromine Stripping plant-10	--	20	0.3
(1 5.)	Bromine Stripping plant-15	--	20	0.3
(1 6.)	Bromine Stripping plant-17	--	20	0.3
(1 7.)	Bromine Stripping plant-18	--	20	0.3
(1 8.)	Air dryer for NaBr solid	--	25	0.3
(1 9.)	Air dryer for LiBr	--	25	0.3
(2 0.)	Rotary dryer 1 (for SOPM- Schoenite)	--	15	0.3
(2 1.)	Rotary dryer 2 (for SOP- Sulphate of potash)	--	15	0.3
(2 2.)	Rotary dryer 4 (for MgSO4)	--	15	0.3
(2 3.)	Bromine Stripping plant-4	--	20	0.3

(2 4.)	Boiler-2 (18 TPH)	Lignite/Imported Coal 79.2 TPD	44	0.6
(2 5.)	Boiler-3 (8 TPH)	LDO/HSD 16.8 TPD	30	0.45
(2 6.)	Boiler-6 (45 TPH) (salt based products)	Coal 197 TPD	11	0.3
(2 7.)	Bromine Stripping plant-7	--	20	0.3
(2 8.)	Bromine Stripping plant-9	--	20	0.3
(2 9.)	Bromine Stripping plant-13	--	20	0.3
(3 0.)	Air dryer for CaBr ₂ solid	--	25	0.3
(3 1.)	Rotary dryer 3 (for Syngenite)	--	15	0.3
(3 2.)	Rotary dryer 5 (for (MgOH ₂))	--	15	0.3
(3 3.)	Hot Air Generator- 1 (2.5 lakh kcal/hr)	Wood / Lignite / Imported coal 7.2 TPD	47	0.6
(3 4.)	HAG-7 (salt based products) (50 lakh kcal/hr.)	Coal 26 TPD	30	0.6
(3 5.)	Bromine plant-2	--	20	0.3
(3 6.)	Bromine Stripping plant-3	--	20	0.3

(37.)	Bromine Stripping plant-8	--	20	0.3
(38.)	Bromine Stripping plant-11	--	20	0.3
(39.)	Bromine Stripping plant-14	--	20	0.3
(40.)	Bromine Stripping plant-16	--	20	0.3
(41.)	Calciner (for MgO)	--	15	0.3
(42.)	Boiler-4 (30 TPH) (non-salt based products)	Coal 131 TPD	51	1.2
(43.)	HAG-4 (salt based products) (4 lakh kcal/hr.)	Coal 1.6 TPD	30	0.6
(44.)	HAG-6 (salt based products) (50 lakh kcal/hr.)	Coal 26 TPD	30	0.6
(45.)	Bromine Stripping plant-12	--	20	0.3

13. Details of Solid waste/ Hazardous waste generation and its management

S. No.	Name of Waste	Item	Other Item	Quantity per Annum	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1)	Empty Barrels/Drums/Containers /Bags/Liners	Hazardous Waste		50	Tons	150	Road		Authorized	

		(as per Hazardous and Other Waste Management rules 2016)							Recyclers	
(2.)	Neutralizer Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		700000	Tons	00	Others	Dumper	Others	Use in Syngas & Potassium Schoenite
(3.)	Fly Ash	Fly Ash		35880	Tons	00	Others	Dumper	Others	Utilize for solar panel making nearby project
(4.)	Used Oil	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		5	Kilolitre	150	Road		Others	Sell to registered re-processors
(5.)	Spent H2SO4 (70-75%)	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		50800	Tons	00	Others	Pipeline	Others	Captive consumption

		Management rules 2016)							
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14. Total Capital Cost for Environmental Management System will be Rs. 5.195 Crores and Recurring Cost will be Rs. 0.95 Crores.
15. Total lease land area of the project is 27762.5 Acres (112350851.43 m²), out of which, 366650 m² land used for project activity and Rest of the land is for salt recovery given by the Government of Gujarat on lease base. Project location is in the desert area and greenbelt development at project site is very difficult. We have earmark and try to develop greenbelt area in existing set up in around 51225 m² by planting soil as well as in leak-proof RCC channel of greenbelt. However, survival rate is very poor so unit has developed greenbelt in nearby village, school area, water reservoir and on hilly area where and it is about 30% of our project area. Also we try to develop additional greenbelt in around 48587 m² area by way of above method.

16. Deliberations by the EAC:

The Committee noted that the proposal was considered by EAC (Industry -3) in its meeting held on 16th & 19th December, 2022, 30th –31st May, 2023 and 30th& 31st January and 1st February 2023. The Committee deferred the proposal want of confirmation from GCZMA or authorized agency of the Ministry with supporting documents regarding the non-requirement of CRZ clearance for the drawl of sea water. Further PP has submitted the copy of GCZMA letter no Env- 10-2023-32-T dated 30th September 2023 stating that the proposed location of M/s Agrocel Industries Pvt. Ltd located at Greater Rann of Kutch near village Dhordo Taluka Bhuj District Kutch is away from CRZ area by 23.5 Km so CRZ Clearance is not required. Accordingly the Committee suggested to obtain the comments of CRZ Division. Further, the Committee suggested to submit the following information :

- (i) Conservation Plan for schedule -I species.
- (ii) Valid Certified compliance report from the IRO for the existing EC.
- (iii) Intake water permission
- (iv) Development of revised Greenbelt action plan
- (v) Public hearing issues and action plan to address the issues.
- (vi) Valid CTO for the existing Unit.

In view of the above, proposal was deferred for want of above said information. Thereafter, information shall be submitted online to the PARIVESH 1 portal for further consideration by EAC

Agenda No. 87.2

Proposed expansion project for manufacturing of Marine Chemicals, Fertilizers, Organic Chemicals & Captive Co-Gen Power Plant located at Survey No. 164, Village: Ratadia, Near, Khavda, Ta. Bhuj, Dist. Kutch, Gujarat-370510 by M/s. Solaris Chemtech Industries Ltd. -Consideration of Environmental Clearance

[Proposal no: IA/GJ/IND3/280064/2020, F.NO.: IA-J-11011/271/2020-IA-II(I)]

1. The proposal is for the **proposed expansion project for manufacturing of Marine Chemicals, Fertilizers, Organic Chemicals & Captive Co-Gen Power Plant located at Survey No. 164, Village: Ratadia, Near, Khavda, Ta. Bhuj, Dist. Kutch, Gujarat-370510 by M/s. Solaris Chemtech Industries Ltd.**
2. The project/activity is covered under Category 'A' of item 5 (a)- **Chemical fertilizers** and 5 (f)-Synthetic organic chemicals of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended).
3. The PP applied for the ToR vide proposal number no **IA-J-11011/271/2020-IA-II(I)** dated 07 Nov 2020. The PP reported that it is an **expansion case**. The proposal is placed in the 87th EAC meeting 21-22 October 2024. Project Proponent and an accredited Consultant, San Envirotech Pvt. Ltd., [**Certificate No: NABET Accreditation Number - NABET/EIA/21-24/SA 0228, valid till 21.03.2025**] made a detailed presentation on the salient features of the project and informed the following:
4. Total land area of the project is 222578 m². Total land is in possession of PP and it is converted for industrial use. No additional land is required for proposed expansion. The PP reported the proposed product details as follows:

S. No.	Product/Activity (Capacity/Area)	Quantity From	Quantity To	Total	Unit	Other Unit	Mode of Transport / Transmission of Product	Other Mode of Transport / Transmission of Product
(1.)	Magnesium Chloride (MgCl ₂) OR	00	57333	57333.000	Others	MTPM	Road	
(2.)	Sodium Bromide (Solid Powder) OR	00	1667	1667.000	Others	MTPM	Road	
(3.)	Di Bromo Neo Pentyl Glycol (DBNPG) OR	00	833	833.000	Others	MTPM	Road	
(4.)	Liquid Bromine	1700	1375	3075.000	Others	MTPM	Road	
(5.)	TBBA - Tetra Bromo Bisphenol A OR	850	00	850.000	Others	MTPM	Road	
(6.)	HBr in TBBA (33% w/w) OR	850	00	850.000	Others	MTPM	Road	
(7.)	Potassium Sulphate (SOP) OR	00	29583	29583.000	Others	MTPM	Road	
(8.)	Potassium Nitrate (KNO ₃) OR	00	29583	29583.000	Others	MTPM	Road	
(9.)	Magnesium Hydroxide (Mg(OH) ₂) OR	00	57333	57333.000	Others	MTPM	Road	
(10.)	Magnesium Oxide (MgO) OR	00	57333	57333.000	Others	MTPM	Road	

(11.)	Enriched Mix Mineral Salt	00	16667	16667.000	Others	MTP M	Road	
(12.)	Zinc Bromide (75%) OR	00	1667	1667.000	Others	MTP M	Road	
(13.)	Tri Bromo Neo Pentyl Alcohol (TBNPA) OR	00	833	833.000	Others	MTP M	Road	
(14.)	n - Propyl Bromide OR	270	417	687.000	Others	MTP M	Road	Captive
(15.)	n - Butyl Bromide OR	270	417	687.000	Others	MTP M	Road	
(16.)	Calcium Bromide (Solid Powder) OR	00	1667	1667.000	Others	MTP M	Road	
(17.)	2,4,6 Tri Bromo Phenol (TBP) OR	00	833	833.000	Others	MTP M	Road	
(18.)	Hydrobromic Acid (48%)	180.0	2037	2217.000	Others	MTP M	Road	
(19.)	Syngenite (K ₂ SO ₄ .CaSO ₄ .H ₂ O) OR	00	29583	29583.000	Others	MTP M	Road	
(20.)	Sodium Bromide (45%) OR	00	1667	1667.000	Others	MTP M	Road	
(21.)	6 - Chloro Hexanone	5.0	00	5.000	Others	MTP M	Road	
(22.)	Deca Diphenyl Bromo Ethane (DBDPE) OR	00	833	833.000	Others	MTP M	Road	
(23.)	Captive Co - Gen Power Plant	7.675	25.6	33.275	Mega Watt(MW)		Others	Captive
(24.)	Potassium Schoenite (K ₂ SO ₄ .MgSO ₄ .6H ₂ O) OR	00	29583	29583.000	Others	MTP M	Road	
(25.)	Lithium Bromide OR	00	1667	1667.000	Others	MTP M	Road	
(26.)	n -Propyl Bromide	270	417	687.000	Others	MTP M	Road	
(27.)	Magnesium Sulphate (MgSO ₄) OR	00	29583	29583.000	Others	MTP M	Road	

(28.)	Calcium Bromide (CaBr) (52%) OR	00	1667	1667.000	Others	MTP M	Road
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5. The PP reported that there is no violation case as per the Notification No. S.O.804 (E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act

6. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Schedule-I Bird Species Peacock or Indian Peafowl (Pavo Cristatus) was recorded within the study area of 10 km radius. Conservation Plan for the same is attached in EIA/EMP report.

7. Ambient air quality monitoring was carried out at 8 locations during October 2020 – December 2020 and the baseline data indicates the ranges of concentrations as: PM10 (46-80 µg/m³), PM2.5 (18-39 µg/m³), SO₂ (07-16 µg/m³) and NO_x (10-21 µg/m³). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

8. At present, the total fresh water requirement (Industrial + Domestic + Greenbelt) is 31493 KLD. After expansion, total water requirement will be 91316 KLD, of which 9614 KLD will be fresh water demand, 4101 KLD will be recycle/treated water and 77601 KLD Brine water. Water requirement will be for Industrial (91232 KLD), Domestic (40 KLD) & Greenbelt (44 KLD) purposes.

9. After expansion, total industrial wastewater generation will be 86032 KLD, of which 3596 KLD will be close loop recycle. Hence actual w/w generation will be 82436 KLD. Major source of wastewater generation will be process effluent (75895 KLD). Additional sources of wastewater streams will be scrubber (30.0 KLD), stripper washing (5811 KLD), cooling bleed off (810 KLD), and boiler blow down and Condensate water (470 KLD). Domestic sewage generation will be 35.0 KLD.

10. Total power demand will be 32000 kVA, which is fulfilled by Paschim Gujarat Vij Company Ltd. (PGVCL) and Captive Power Plant of 33.275 MW. Unit has already installed stand by D.G. Sets of 500 kVA & 1735 kVA and also proposed to install additional stand by D.G. Sets of 500 kVA x 3 Nos. to meet the power requirement in case of power failure from grid.

11. Details of Process emission generation and its management:

S. No.	Source	Fuel	Stack Height(m)	Stack Diameter(m)
(1.)	D.G Set (1735 KVA)	HSD 400 Lit/hr.	30	0.3
(2.)	Boiler (45 TPH)	Imported Coal 189 TPD	60	1.2
(3.)	Boiler (45 TPH)	Imported Coal 189 TPD	60	1.2
(4.)	Boiler (45 TPH)	Imported Coal 189 TPD	60	1.2
(5.)	HAG-2 (Salt based products) 4 Lakh Kcal/hr.	Coal 1.6 TPD	24	0.3

(6.)	HAG-3 (Salt based products) 50 Lakh Kcal/hr.	Coal 26 TPD	30	0.6
(7.)	HAG-5 (Salt based products) 50 Lakh Kcal/hr.	Coal 26 TPD	30	0.6
(8.)	HAG-6 (Salt based products) 50 Lakh Kcal/hr.	Coal 26 TPD	30	0.6
(9.)	D.G Set-4, 5 & 6 (500 KVA x 3 nos.)	Diesel 630 lit/hr.	21	0.3
(10.)	Bromine Plant-1	--	30	0.3
(11.)	Bromine Plant-2	--	30	0.3
(12.)	Bromine ETP Tank	--	17	0.3
(13.)	Chlorine Charging Station	--	20	0.3
(14.)	Bromine Plant-3	--	20	0.3
(15.)	Bromine Plant-5	--	20	0.3
(16.)	N Propyl Bromide	--	20	0.3
(17.)	Hydrobromic Acid	--	30	0.3
(18.)	ZnBr/LiBr/CaBr/NaBr	--	30	0.3
(19.)	HBr in TBBA	--	30	0.3
(20.)	Process reactor of TBP	--	30	0.3
(21.)	Process reactor of DBDPE	--	30	0.3
(22.)	Rotary Dryer-4 (for MgSO ₄)	--	15	0.3
(23.)	D.G Set (500 KVA)	HSD 150 Lit/hr.	12	0.3
(24.)	Air Dryer for CaBr ₂ solid	--	25	0.3
(25.)	Air Dryer for NaBr Solid	--	25	0.3
(26.)	Air Dryer for LiBr	--	25	0.3
(27.)	Rotary Dryer-5 [for Mg(OH) ₂]	--	15	0.3
(28.)	Calciner (for MgO)	--	25	0.3
(29.)	Boiler (30 TPH) (non-salt based products)	Coal 131 TPD	47	1.2
(30.)	Process reactor of DBNPG	--	30	0.3
(31.)	Boiler (15.0 TPH)	Imported Coal - 63 TPD	63	0.9
(32.)	HAG-1 (non-salt based products) 5 Lakh Kcal/hr.	Coal 2 TPD	24	0.3

(33.)	HAG-4 (Salt based products) 50 Lakh Kcal/hr.	Coal 26 TPD	30	0.6
(34.)	Bottling Plant	--	32	0.3
(35.)	Bromine Plant (HBr, n-PBr, n-BBr & 6 CHx)	--	14	0.3
(36.)	TBBA Plant	--	30	0.3
(37.)	Bromine Plant-4	--	20	0.3
(38.)	Boiler (45.0 TPH)	Imported Coal-189 TPD	60	1.2
(39.)	Process reactor of TBNPA	--	30	0.3
(40.)	Rotary Dryer-3 (for Syngenite)	--	15	0.3
(41.)	Boiler (45 TPH)	Imported Coal 189 TPD	60	1.2
(42.)	Rotary Dryer-1 (for SOPM-Schoenite)	--	15	0.3
(43.)	Rotary Dryer-2 (for SOP-Sulphate of Potash)	--	15	0.3

12. Details of Solid waste/ Hazardous waste generation and its management:

S.No.	Name of Waste	Item	Other Item	Quantity per Annun	Unit	Distance from Site(KM)	Mode of Transport	Other Mode of Transport	Mode of Disposal	Other Mode of Disposal
(1)	ETP Sludge	Hazardous Waste (as per Hazardous and Other Waste Management rules 2016)		198000	Tons	115	Road		Treatment, Storage and Disposal Facility (TSDF)	

(2 .))	ETP Sludge From Bromine Plant	Hazar dous Waste (as per Hazar dous and Other Waste Manag ement rules 2016)		600	Ton s	115	Road		Treatme nt, Storage and Disposa l Facility (TSDf)	
(3 .))	Discarded Containers/L iners/Bgas	Hazar dous Waste (as per Hazar dous and Other Waste Manag ement rules 2016)		9	Ton s	150	Road		Others	Sell to Registered Recyclers.
(4 .))	Used Oil	Hazar dous Waste (as per Hazar dous and Other Waste Manag ement rules 2016)		35.2	Kil olitr e	150	Road		Others	Sell to registered re- processors
(5 .))	Process Sludge	Hazar dous Waste (as per Hazar dous and Other Waste		792	Ton s	115	Road		Others	Sent to CHWIF

		Manag ement rules 2016)								
(6 .))	Fly Ash	Fly Ash		150 0	Ton s	50	Road		Others	Send to brick manufactur er/cement manufactur es

13. Total Capital Cost for Environmental Management System will be Rs. 7.335 Crores and Recurring Cost will be Rs. 1.445 Crores.
14. Rs. 5.0 Lakhs per annum has been allocated for occupational health and safety of workers.
15. PP proposes to allocate Rs. 150.0 Lakhs (0.75% of project expansion cost) towards Corporate Social Responsibility, which is as per the OM of MoEFCC.

16. **Deliberations by the EAC:**

The Committee noted that the proposal was considered by EAC (Industry -3) in its meeting held on 16th & 19th December, 2022, 30th –31st May, 2023 and 30th& 31st January and 1st February 2023. The Committee deferred the proposal want of confirmation from GCZMA or authorized agency of the Ministry with supporting documents regarding the non-requirement of CRZ clearance for the drawl of sea water. Further PP has submitted the CRZ demarcation study along with high tide line and low tide line for the drawl of sea water carried out by NCSCM one of the authorized agency of for the purpose of said work. Accordingly the Committee suggested to obtain the comments of CRZ Division. Further, the Committee suggested to submit the following information :

- (i) Conservation Plan for schedule -I species.
- (ii) Valid Certified compliance report from the IRO for the existing EC.
- (iii) Intake water permission
- (iv) Development of revised Greenbelt action plan
- (v) Public hearing issues and action plan to address the issues.
- (vi) Valid CTO for the existing Unit.

In view of the above, proposal was deferred for want of above said information. Thereafter, information shall be submitted online to the PARIVESH 1 portal for further consideration by EAC

Agenda No. 87.3

Amendment of EC for addition of adjacent plot for Manufacturing of Synthetic Organic Chemical products (Dyes & Dyes Intermediates) located at Plot No. 56/B-2, Phase-I, GIDC-Vatva, Ahmedabad, Gujarat- 382445 by M/s. Huechem Global (Formerly known as M/s. Laakoona Reactions) - Amendment of EC

[Proposal No.: IA/GJ/IND3/298667/2023, File No.: IA-J-11011/170/2023-IA-II(I)]

- i. The Project Proponent and the accredited Consultant M/s. Perfect Enviro Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:(NABET Registered NABET/EIA/2225/RA0284 (Rev. 01) valid up to 26.11.2025).
- ii. The proposal is for Amendment in Environmental Clearance to the project, “Addition of adjoining Plot No. 55/2/B with existing Plot No. 56/B-2 for Synthetic Organic Chemical products (Dyes & Dyes Intermediates)” at Plot no. 56/B-2 and 55/2/B, Phase - 1, GIDC Vatva, Ahmedabad- 382445, Gujarat by M/s. Huechem Global (Formerly known as M/s. Laakoona Reactions). The Transfer of EC and name change from M/s. laakoona Reactions to M/s. Huechem Global has been granted to M/s. Huechem Global vide File No. : SEIAA/GUJ/EC/5(f)/872/2020 dated 12.08.2024.
- iii. The project proponent has requested for amendment in EC vide EC letter No. SEIAA/GUJ/EC/5(f)/872/2020 dated 07.07.2020 with the details here as under:

S. No.	Plant/Equipment/ Facility	Existing Configuration	Proposed Configuration	Final configuration after Amendment	Remarks if Any
1	Request for addition of plot no. in EC Subject, Para 2, by addition of adjacent plot i.e plot no. 55/2/B	Project address: Plot no. 56/B-2, Phase - 1, GIDC Vatva, Ahmedabad- 382445, Gujarat	Project address: Plot no. 55/2/B Phase - 1, GIDC Vatva, Ahmedabad- 382445, Gujarat	Project address: Plot no. 56/B-2 & 55/2/B Phase - 1, GIDC Vatva, Ahmedabad- 382445, Gujarat	Addition of plot no. 55/2/B with existing plot 56/B-2
2	Condition no. 112	The unit shall develop green belt within premises as per the CPCB guidelines, However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC I GPCB and submit an action plan of plantation for next three years to the GPCB.	To comply with the existing condition of EC unit to purchase a new adjacent land having plot area 3681 m ² . And as per the guidelines and unit falls under CPA unit will maintain 40% greenbelt of total plot area. (Existing plot area: 2636 m ² + Proposed plot area: 3681 m ² = Total plot area: 6317 m ²) i.e 2527 m ²	40% greenbelt of total plot area will be maintained	–
3	Plot area, Greenbelt area:	2636 m ² 0 m ²	3681 m ² 2527 m ²	6317 m ² 2527 m ²	–
4	Production	No change			

iv. The project, "Addition of adjoining Plot No. 55/2/B to the with existing Plot No. 56/B-2 for Synthetic Organic Chemical products (Dyes & Dyes Intermediates)" is listed at S.No. 5(f) of the Schedule of Environment Impact Assessment (EIA) Notification under cat "B" but the project is being appraised at Central Level by Expert Appraisal Committee (EAC) as Cat "A" project as the Project located in Critically Polluted Area of GIDC Vatva, Gujarat.

v. State Level Environment Impact Assessment Authority, Gujarat had issued EC earlier vide letter no. SEIAA/GUJ/EC/5(f)/872/2020 dated 07.07.2020. Existing land area as per EC is 2636 m², proposed additional land area is 3681 m², Total area after expansion will be 6317 m². Industry will develop green belt in an area of 40% i.e., 2527 m² out of total area of the project (6317 m²).

vi. **Deliberations by the EAC:**

- i. The Committee noted that the Transfer of EC and name change from M/s. laakoona Reactions to M/s. Huechem Global has been granted to M/s. Huechem Global vide File No. : SEIAA/GUJ/EC/5(f)/872/2020 dated 12.08.2024. further it was noted that PP has provided 20% greenbelt within the plant premises against the 40% greenbelt. Whereas project is located in CPA. It was also noted that PP has proposed to use land of school for greenbelt development which seems that PP wants to transfer the compliance obligation to the school. The committee suggested that it is not appropriate to transfer the compliance obligation to the educational institute and hence PP shall develop the remaining greenbelt within the plant premises.
- ii. The PP shall revise the layout plan to include the 33% greenbelt within the plant premises.
- iii. PP has not submitted point wise compliance report as OM dated 31.10.2019. Therefore, PP shall provide quantified and specific compliance and action plan for the additional safeguard measures prescribed in the Ministry's O.M. dated 31.10.2019 for critically and severely polluted areas.

Accordingly, proposal was deferred for want of above said information. Thereafter, information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Any Other Item(s)

Item No. 1

Proposed project to produce Light Soda Ash (LSA) of 11,00,000 TPA capacity; 5,00,000 TPA of Dense Soda Ash (DSA) and 2,00,000 TPA Sodium Bicarbonate (SBC) located at near village Bada, Taluka – Mandvi, District – Kutch in the Gujarat by “Greenfield Chemical Complex” of GHCL Ltd. – Reconsideration of Environmental Clearance

[Proposal No.: IA/GJ/IND3/408164/2022, File No.: IA-J-11011/293/2021-IA-II(I)]

1. Deliberations by the EAC:

The proposed production of Light Soda Ash (LSA) of 11,00,000 TPA capacity, 5,00,000 TPA of Dense Soda Ash (DSA) and 2,00,000 TPA Sodium Bicarbonate (SBC) located at near village Bada, Taluka - Mandvi, District - Kutch in the Gujarat by “Greenfield Chemical Complex” of GHCL Ltd.- Site Visit Report

As per minutes of the 84th Expert Appraisal Committee (Industry-3) meeting held during 21st - 22nd August, 2024, a site visit of “**Greenfield Chemical Complex**” of **GHCL Ltd.** was undertaken by the sub-Committee comprising Dr. Suresh Panwar, Dr. Kishore Malviya and Sh. A N Singh, Scientist F, Ministry of Environment, Forest & Climate Change to assess the existing environmental scenario of the proposed project site.

The Sub-Committee alongwith Dr. Yogesh Kumar, Scientist – C, IRO, MoEF&CC, Gandhinagar and Mr Naresh Chaudhari, GPCB RO Kutch (West) visited the site of “**Greenfield Chemical Complex**” of **GHCL Ltd.** on 09.10.2024.

(A) The following officials of GHCL Ltd. were present at site during inspection:

1. (A) Mr N N Radia- COO- GHCL
2. Mr Jayesh Patel- Projected Head GHCL
3. Mr Malav Dalwadi- CEO T R Associates and Environment Pvt Ltd.
4. Mr Jay Ram- Environmental Engineer GHCL

At the outset, Officials of **M/s. GHCL Ltd. welcomed the Sub-committee and** briefed the Sub-Committee about the proposed project, location of unit, land acquisition status, layout map, entry and exit of the proposed plant area, seawater intake and outfall pipeline area, proposed air emissions control system, effluent management system, greenbelt etc. The Sub-Committee visited the project site and had general round of the proposed project site, outfall point.

A. Background

(i) Project location

The proposed project site is located near village Bada Village in Mandavi Taluka, District Kutch, Gujarat, which is geographically located at the Arabian Sea Coast off Bada Village. It is located about 70 km from district headquarter Bhuj, 25 km from Mandavi and the road connectivity of Bada Village through NH 41 which is connecting Mandavi and Naliya.

(ii) The details of various proposed products to be manufactured are as follows:

Sr. No.	Name of the Product	Production Capacity (MT/Month)	CAS Number	End use
1	Light Soda Ash	11,00,000 TPA	497-19-8	Manufacturing of glass, usage in chemical industry, paper and detergent manufacturing, and food industry
2	Dense Soda Ash	5,00,000 TPA	497-19-8	
3	Sodium bicarbonate	2,00,000 TPA	144-55-8	
Captive Co-generation Power plant Steam (CFBC boilers)			120 MW	
Emergency DG Set			5 MVA	
Note- The production capacities are planned in phased manner and for Phase 1 production capacity for LSA: 5,50,000 TPA, Dense Soda Ash: 2,50,000 TPA, SBC: 1,00,000 TPA and 60 MW for Captive Co-generation Power plant.				

The proposed project also involves sea water intake pump house of 16×10^5 m³/day ($2 \times 8 \times 10^5$ m³/day) and Effluent disposal facility of 15.8×10^5 m³/day ($2 \times 7.9 \times 10^5$ m³/day).

The soda ash process is in principal based on the well known (solvay) ammonia process.

(iii) Plot Area

As per EIA report, total plot area required for the proposed project is 546 ha. Break up of land and its acquisition details are as given below:

S.N.	Type of Land	Total Land Sanctioned (Ha)	Land Acquired	Remaining land acquisition under finalisation	Total acquired /finalisation	Remaining land acquisition under process
1	Government Land	101.6351 (Letter from Industry Centre has been submitted)	76.9669 (Letter from Collector to GHCL for	24.6682	101.6351	--

		for allotment of land)	acquired plot)			
2	Private Land	444.6849	298.5911 (M/s GHCL has acquired)	23.3502	321.9413	122.7357
		546.32	375.558	48.0184	423.5764	122.74

It is proposed that out of 546.32 ha land, area earmarked for greenbelt is 180 .2856 ha (33 %).

As per proposal, M/s GHCL will withdraw water from two intake locations and disposal of effluent at two outfall locations and length of sea water intake and outfall effluent disposal is as given below:

- (i) Intake pipeline 1 length is 1381.99 m.
- (ii) Intake pipeline 2 length is 1388.64 m
- (iii) Outfall pipeline 1 length is 2770.17 m
- (iv) Outfall pipeline 2 length is 3281.88 m

It is reported that Pipelines will be laid through micro tunnelling. The pipelines for sea water intake and effluent disposal will be laid in a safe manner so that sand dunes stretch between the plant boundary and respective land fall points (LFP) are protected without any disturbance to their natural appearance and stability.

GCZMA recommendations

Forest & Environment Department, Government of Gujarat vide file no ENV/10/2021/184/T-Cell dated 26th December, 2023 has conveyed the GCZMA recommendations for grant of CRZ clearance for seawater intake and effluent disposal facilities. Baseline Marine Environmental Assessment, Effluent Dispersion Modeling Sand Dune Morphology study have been carried out by CSIR, NIO, Goa, Mumbai. It is reported that as per findings, suitable corridor for laying seawater intake and outfall were identified. Coast near site is stable based on satellite image analysis and sand dunes are found to be stable and suitable for tunnelling activities. A study on status survey and conservation plan for sea turtles along Mandavi Taluka of Bhuj, Gujarat was conducted by Zoological Survey of India and submitted its report in April, 2019. It is reported that Mandvi taluka is reported to have maximum sandy beaches and no presence of mangroves. The Kutch coastlines reported to have stabilized dunes specially around Mandavi. It is reported that no sea turtle nest/ fresh crawl marks were observed along the shore /beach surveyed. It is also reported that there is no existence of mangroves in proposed project area along route of the proposed lying intake and outfall pipelines and there would not be any impact on mangroves due to proposed activities.

Forest Clearance :

Regional Office, Gandhinagar, MoEF&CC vide letter dated 04.01.2024 has granted final (stage - II) approval of Central Government under Forest (Conservation) Act, 1980 for proposed diversion of 0.9689 ha un class forest land for laying part of sea water intake and effluent disposal pipeline and passage for related construction pipeline and passage for construction equipment movement in Kachchh District. One of the conditions stipulated is compensatory afforestation shall be taken up by the Forest Department over 2.00 ha de-graded forest land at Village Dhokda, Taluka Mandavi, District Kuchchh at the cost of user agency.

NABET-accredited consultant

Initially EIA-EMP report for the proposed **Greenfield Chemical Complex of M/s GHCL Ltd.** was prepared by CSIR, NEERI. Further based on recommendation of the EAC (Industry -3), EIA-EMP report was updated and validated by QCI-NABET Environmental Consultant for item 4 (e) category A of schedule of EIA Notification 2006, namely by M/s T R Associates. NABET-accredited consultant has carried out additional 3 months data collection as well as additional 1 month data to validate the existing study and also submitted the undertaking that they have verified the EIA/EMP report and prepared an addendum report describing findings and observations. It was also presented that they have not observed any significant deviation in the EIA report prepared by the national reputed organisation NEERI.

Conservation of Ecology and Biodiversity

As per report prepared by Gujarat Institute of Desert Ecology, the project site does not fall in 10 km periphery of any protected areas such as National Park or Sanctuary or Eco-sensitive Zone. Major land use land cover in the study area observed to be waste land, rain fed agriculture land, water bodies, Arabian sea and sand dunes and transport network. Due to sandy nature of shoreline the mangrove system is found to be absent at project site.

Approval of conservation plan for schedule – 1 species :

Chief Wildlife Warden, Gujarat vide letter no WLP/32/A/50-52/2023-24 dated 24.04.2023 has granted approval of conservation plan of selected schedule -1 species for greenfield project of M/s GHCL at Bada Village, Mandavi, Kutch, Gujarat. The Conservation plan of Rs. 136.50 Lakhs has been approved which includes components of Habitat Conservation, Protection and improvement; Research and Monitoring; Education and Awareness; Miscellaneous and monitoring.

Environmental Management Plan

1. Details of process emissions generation and its management:

SR.NO	Stack attached to	Capacity	Height of the stack (m)	Fuel & its Consumption	Expected Pollutant	APC System	GPCB Limit
1	CPP with flue gas desulphurization CFBC Boiler (6 Nos.)	150 TPH	130 m	Imported Coal/Lignite/ Pet coke (Imported Coal: 13,14,000 TPA, Lignite :19,71,000 TPA,	SPM SO ₂ NO ₂ Hg	Individual ESP with each Boiler with desulphurization	PM ≤ 30 mg/Nm ³ SO ₂ ≤ 100 mg/Nm ³ NO ₂ ≤ 100

				Pet coke: 9,12,500 TPA)			mg/Nm ₃ Hg ≤ 0.03 mg/Nm ₃
2	D G Set (2/3 Nos.)	5 MVA	30 m	HSD (60 KL)	HC CO PM NO _x	Retrofitting	NO _x 710 ppmv NMHC 100 mg/Nm ₃ PM 75 mg/Nm ₃ CO 150 mg/Nm ₃
3	Lime Kiln 1		68 m	Coke or Briquette or Anthracite (Coke - 1,30,000 TPA, Briquette- 1,55,000 TPA, Anthracite - 1,10,000 TPA)	SPM SO ₂ NO ₂	Scrubber and Dust Collector system	SPM ≤ 150 mg/Nm ₃ SO ₂ ≤ 100 ppm NO ₂ ≤ 50 ppm
4	Lime Kiln 2		68 m			Scrubber and Dust Collector system	
5	Lime Kiln 3		68 m			Scrubber and Dust Collector system	
6	Lime Kiln 4		68 m			Scrubber and Dust Collector system	
7	Lime Kiln 5		68 m			Scrubber and Dust Collector system	
8	Lime Kiln 6		68 m			Scrubber and Dust Collector system	

SR.NO.	Stack attached to	Height of the stack (m)	Expected Pollutant	APC System
1	Ammonia Recovery system	42 m	Ammonia	Water scrubber followed by acid aqueous solution
2	Lime grinding system / Slaker	65 / 20 m	PM / Water vapor	Bag filter / Adequate stack height

3	Calcliner unit	37 m	PM	Scrubber, Bag filter
4	Densification	43 m	PM	Scrubber
5	Sodium Bi-Carbonate Unit	30 m	PM	Bag filter
6	Lime Kiln	Closed system	PM	Scrubber and Wet ESP

2. Details of Solid Waste/ Hazardous Waste Generation and Its Management:

Sr. No.	Type of Waste	Category	Quantity	Mode of Disposal
1	Settled Sludge from treatment of effluent generated from captive power plant & RO/DM Plant	35.3	1.0 MT/Annum	Collection, storage and disposal at approved TSDF site
2	Used Oil	5.1	12 KL	Collection, storage and used within premises as a lubricant / sold to registered recycler
3	Discarded Drums and Bags	33.1	6.45 MT/Annum	Collection, storage & sold to authorized vendor
4	Spent Ion exchange resin	35.2	3000 Lit/Annum	Collection, storage and disposal at approved TSDF site
5	Used Cotton	33.2	5 MT/Annum	Collection, storage and disposal at approved CHWIF site
6	Lead acid Batteries	Schedule-IV (17)	5 MT	Collection, storage & sold to authorized agency through auction
7	E-Waste	Schedule-I of E-Waste (Management) Rules, 2022	5 MT/Annum	Collection, storage & sold to authorized agency through auction
8	Plastic Waste	-	2295 MT/Annum	Collection, Storage and Disposal to CPCB/SPCB authorized recyclers under EPR of Plastic Waste Management

9	Bio-medical Waste	-	0.035 MT/Annum	Collection, storage and disposal as per Bio-medical Waste Management Rules, 2016
10	Construction and Demolition Waste	-	20 TPD	Collection, storage and utilize internally for area filling, road making etc.

Non-Hazardous Solid Waste Details

Sr. No.	Type of Waste	Source of Generation	Quantity	Mode of Disposal
1	STP sludge	STP	1152 MT/Annum	Reused as Manure in Greenbelt Development
2	Kitchen Waste	Canteen	0.01 MT/Day	Collected and composted in Composter and further used as manure for gardening in the premises
3	Ash (Fly ash & Bottom Ash)	Boiler	2726.847 TPD	Collection in silo, storage & sold to cement Manufacturing/ Brick Manufacturing
4	Limestone rejects	Desulphurization Process	1,00,000 MT/Annum	Collection and reused in Boiler for desulphurization and as a sweetener in cement industry, road making, pavement etc.

3. Wastewater management :

The liquid effluents from the soda ash process includes wastewater from distillation, brine purification and cooling waters from lime kiln gas washers, absorption, distillation towers and calcination. Wastewater shall be treated and solids will be separated in the Effluent Treatment Plant. The treated and diluted effluents will be disposed off into Arabian sea at designated point as per dispersion modelling studies and recommendation of SCZMA. Online pH, temperature, flow meter, SS and TOC analyser shall be provided for online monitoring and records shall be maintained. Sewage will be treated in the STP and treated water will be recycled for horticulture purpose.

4. Capital Cost and recurring cost earmarked for EMP and its break up is as given below:

S.N	EMP			Capital cost in Rs Crore	Recurring cost Crore per annum
		Components	Cost		

1	Air Pollution	Flue Gas Emissions Individual ESP with 6 No. Boiler Scrubber and Dust Collector system with 6 No. Lime Kiln	12.03	89.280	1.5
		Process Gas Emissions Water Scrubber with Ammonia Recovery system (Including 2 no of stack)	2.70		
		Bag Filters & Scrubbers	11.45		
		ESP- CFBC	30		
		Dust Suppression& Bed Ash System(Fly ash management) including Wind Screen	6.2		
		Various Stacks	26		
		Dry Fog system	0.9		
		2	Water Pollution		
3	Environmental Monitoring	Continuous Emission & Effluent Monitoring System	3.4	3.4	1.3
4	Noise Pollution	Acoustic Enclosures	2.9	2.9	0.0035
5	Hazardous /Solid Waste Management	Storage area & Membership Charges	1.05	1.05	1.10
6	Greenbelt Development	Thick Greenbelt Development as per EMP	20	20	0.5
7	Fire & Safety	Fire Hydrant System	2.539	2.916	0.2
		Fire extinguisher	0.227		
		Automation for Chlorine and ammonia storage area	0.15		

8	Occupational Health & Safety	OHC, PPE'S, Mock drill, Safety Audit, & Misc	0.444	0.444	0.15
9	Miscellaneous	Rain water harvesting System, Env. Lab & Misc.	8.40	53	2.66
		Drainage Network for rain water	44.6		
10	CER	Promoting renewable energy, skill development Programme, Organic farming, water conservation (like village pond deepening), forestry etc. and develop infrastructure of schools, health facilities, Fishing activities, roads in nearby villages	18.04	18.04	-
Total A				205.03	7.53
11	Renewable Energy (B)	Installation of Solar + Windmill (Capacity – 20 MW)	113	113	--
Total A + B				318.03	7.53

Break up of CER activities is as given below:

S.N	Type of Activities	Yearly amount to be spent in CER activities (Rs. In Crore)					Total Amount to be spent (Rs. in crore)
1	Provision of Solar light, solar panel and its maintenance in nearby villages within 10 km of study area;	0.1	0.1	0.1	0.1	0.1	0.5
2	Infrastructure development Such as primary healthcare units and the fulfilment of the basic amenities in PHCs including	0.00	0.27	0.29	0.31	0.35	1.22

	mobile medical van and Provide Bala-Rasayana to Malnutrition Children in Aanganwadi and PHC of nearby Villages						
3	Animal husbandry promotion through providing support for breed improvement, animal health care, Veterinary doctor and others as well as provides Fodder for cattle feeding nearby villages	0.8	0.85	0.9	0.9	0.9	4.35
4	Infrastructure development for quality of education, which will ultimately upgrade schools in nearby villages	0.25	0.27	0.29	0.31	0.35	1.47
5	Development Initiatives for Fishing Communities such as Creation of infrastructure like ice plants, cold storages as well as provide operational inputs such as fishing boats, nets and engines	0.15	0.15	0.15	0.15	0.15	0.75
6	Promoting environment friendly and nature-based solutions to enhance productivity of farming (Organic Farming) activities. It covers capacity building on farming techniques, provision of highquality seeds/manure, efficient irrigation solutions, etc.	0.6	0.6	0.6	0.6	0.6	3.0
7	Promoting activities for skill building to improve employment	0.45	0.45	0.45	0.45	0.45	2.25

	opportunities and women empowerment in nearby villages						
8	Development of facilities within nearby villages such as roads	0.20	0.20	0.20	0.20	0.20	1.00
9	Activities for water conservation like deepening of nearby village ponds for storage of rainwater for domestic use of villagers	0.50	0.50	0.50	0.50	0.50	2.5
10	Promoting plantation activities through Forests by Heartfulness Institute in nearby villages	0.20	0.20	0.20	0.20	0.20	1.00
	Total	3.25	3.59	3.68	3.72	3.80	18.04

B. During site visit, following observations were made:

Visit Point 1: Project Site Entry

The starting plot while coming from Bhuj was explained and showcased on the toposheet. Enough road width was observed for the entry and exit point for at the proposed project site. It was observed that Bada village is quite away from the project site entry and it was informed by the PP that the raw material and finished goods trucks will never move towards the village. During visit, no construction activities at the project site was observed. It was observed that cotton cultivation was taking place at vacant land of the project site and its surrounding. PP informed that they are using the proposed land for temporary agriculture purpose and land use has been changed for non-agriculture purpose /industrial purpose for the acquired land. The surrounding land are private land owned by people. The study area is located in arid landscape with minimum rainfall. In the buffer area of the study area i.e. outside the project site, check dam was observed at northern side of buffer area within 10 km distance of project site and these also include seasonal rivers, rivulets streams and small nallahs in buffer area.

It was suggested by the committee to develop enough parking space inside the premises, with full fledged infrastructure for truck drivers. Parking area should be paved to avoid fugitive dust emissions. There should be a learning centre over road behaviour for the drivers. At no point of time the trucks should create any hindrance to the local movements of the nearby villagers.

Following statistics have brought into the notice of EAC Committee:

Population

- Bada population – 2011 census – 2719 Nos, 592 houses .
- Details of Distance w.r.t. plot boundary and main plant as given below:

S.N.	Locations	Distance from Plot Boundary (mtrs)	Distance from Main Plant (mtrs)
1	Vipasana Center	630	1800
2	Government High School	920	2330
3	Bada Primary School	610	2290
4	Bada Village	580	2000
5	Bhimnath Mahadev (It is a shrine worship place for specific Community)	190	1500

Note: All distances are from 546.32 Ha (Land Boundary). All the above locations are towards N and NW direction from the project site. It was noted that Vipasana Centre is located at an arial distance of 630 m from the project boundary, which is also separated by a seasonal water stream i.e. situated opposite bank of seasonal stream.

It is observed that the seasonal water stream width starts from 81m to 96.6 m at the tip of the vipassana land. The water stream's check dam is 316m wide at the check dam point and the Vipasana center is 630m away from the plant boundary. Seasonal water stream is 314 m away from the proposed plant boundary. It was informed that land between stream and boundary is a private land acquired by people and same is not a part of proposed project. The wind rose diagram submitted in the EIA report and the orientation of wind mills in the area clearly describes that there will be minimal impact from the stack of the proposed plant.

The committee travelled all the area along seasonal stream banks to gain the holistic view on the impact of emissions from the plant on Vipasanna meditation center. Taking the distance from the plant boundary, river width and the wind direction into consideration, there will be minimal impact on the vipassana centre due to upcoming project. However, as a precautionary measures, the sub-Committee has further advised to develop 100m width green belt as buffer along the boundary towards Vipasana meditation centre. It was also advised that PP shall ensure that no /untreated/treated water from the project site shall be discharged into seasonal water stream.

Visit Point 2: Seawater Intake

The committee saw the sea water intake point which is passing under the sand dunes along the coast. It was observed that Dune height was varied from 1.5 to 5 m height with beach grass and binder. It was stabilized dunes. It was observed that flat sandy seashore. It was noted that Plant/complex will be established away from shore line and sand dune area. The sand dune and shore area will be used for laying seawater intake and effluent disposal pipelines. The pipelines will be laid through tunnelling in sand dune stretch to avoid and disturbance to sand dune area. The laying of pipeline will be one-time activities and restricted only for construction only. Since the line will be placed through tunnelling, there will be minimal adverse impact on the sand dunes of the area.

It was observed that wind mills are located in and around the project site. It was informed that out of which, four wind mills are located inside the proposed site. out of which two windmills will be relocated outside from the plant boundary. NOC has been given by the M/s GSFC. The same has no adverse impact on the proposed project.

Visit point 3: Seawater out fall point:

The committee walked down along the unclassified forest area, crossed sand dunes and reached upto the seashoreline area. No habitation was observed on the way of passing through forest area towards seaside. The area was dominated by plant species namely *Prosopis juliflora*, in certain patches a dominant herbs was seen which plays an important role in sand dune stabilization. It was advised to conserve plant species and try to increase the density in the sand dune area by artificial plantation. The best model in Gujarat for sand dunes stabilization and density improvement shall be taken up by the project proponent in consultation with State Forest Department.

It was observed that, proposed route of the outer pipeline is passing through stable sand dunes. There are no sand dunes observed near the outfall of seasonal water stream into sea. It is observed that outfall of natural water stream to sea is a rocky beach. It was observed that steep slope is there and high tide water line marking was seen up to sand dune bottom. No fishing boats were observed at seashore side. However, Paghadiya fishing nets were observed.

It was informed that the tunnelling of pipelines will not cause any hindrance to local fisherman if they want to carry out any fishing activity. The effluent will be monitored regularly by the concerned authorities and additional studies will be carried out periodically by institute of repute like NIO.

Visit point 4: Vipassana Centre

The committee moved around the area of vipasana centre and observed that the sewage water is accumulated into the pond beside the premises of vipasana centre. In addition, experts had visited into the Vipassana centre but no communication had been established at the site. It brought into the notice of Committee that the M/s GHCL will take up initiatives to restore the water quality of the pond under CSR. The committee moved around the Bada village and observed that the government school Bada village is approx. at an arial distance of 960 m from the project site. It was informed that approach road to the project site is much before the Bada village so there will be no adverse impact towards village side due to transportation activities.

Visit point 5: Visit of vocational training centre

It was informed that three courses were undergoing, which are approved under National Skill Development Centre. These courses provided by GHCL foundation under CSR at free of cost to the youths of surrounding villages.

GHCL is carrying out CSR activities in the area of education, animal husbandry including fodder, fodder plot development, veterinary service with veterinary van. GHCL is also working in area of health with mobile clinic, agriculture and fisheries. They have spent around 6.5 crores in last three years in surrounding villages under CSR.

The committee had discussed regarding the dust emission due to transportation of the lignite/coal in which project proponent informed that covered vehicles, covered shed, covered gantry will be provide for storage and conveying of fuel. Over and above said precaution sprinklers and windshield shall be utilise to avoid any fugitive emission. After above said precaution there will be dense green belt as advised by MoEF&CC.

Recommendations of the Sub-Committee:

- (i) Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. coal shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. Fly ash shall be collected in Silo. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (ii) 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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms with full fledged infrastructure for truck drivers etc. Parking area should be paved to avoid fugitive dust emissions. There should be a learning centre over road behaviour for the drivers.
- (iii) PP shall develop 100m thick green belt as buffer along the boundary of project site towards Vipasana meditation centre.
- (iv) PP shall install continuous air quality monitoring station towards Vipasana Centre to monitor real time ambient air quality status of the area.
- (v) 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. In case of the treated effluent is to be utilized for gardening, real time monitoring system shall be installed at the ETP outlet.
- (vi) PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority.
- (vii) The Pipeline of seawater intake and effluent disposal shall be laid in a safe manner (using tunnelling) so that the sand dunes stretch between the plant boundary and respective land fall points are protected without any disturbance to their natural appearance and stability.
- (viii) PP shall ensure that no /untreated/treated water from the project site shall be discharged into seasonal water stream.

- (ix) PP shall ensure the implementation of conservation plan of Rs. 136.50 Lakhs for schedule – I species as approved by Chief Wildlife Warden, Gujarat vide letter no WLP/32/A/50-52/2023-24 dated 24.04.2023 for greenfield project of M/s GHCL at Bada Village, Mandavi, Kutch, Gujarat.
- (x) PP shall ensure the time bound implementation of CER activities of Rs. 18.01 Crores.
- (xi) M/s GHCL shall take up initiatives to restore the water quality of the water pond located near Vipasna Centre. M/s GHCL shall carry out tree plantation drive along road of Bada Village in consultation with Village Administration.
- (xii) PP shall provide training to 10 local youth every quarter on environment management including air pollution control device, ETP, solid waste management, fly ash based brick manufacturing, green belt development as part of skill development programme.
- (xiii) PP shall set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xiv) Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

The proposal was considered by the EAC in its meeting held on 21st October, 2024 and the Committee discussed the site visit report undertaken by the Sub- Committee. Further the issues were also discussed with project proponent.

The Committee noted that the proposal was earlier considered by the EAC in its 80th meeting held on 7th June, 2024 and the Committee recommended the proposal for grant of EC.

Deliberations by the EAC (Industry -3) :

- i. PP informed the following :
 1. M/s. GHCL Limited will acquire a total of **546.3200 hectares** for the proposed project. In alignment with this requirement, steps have been initiated in accordance with the terms outlined in a Memorandum of Understanding (MOU) with consolidators. While the acquisition process is progressing, advances related to this have been planned and are being executed to ensure the necessary land acquisitions are in place prior to the commissioning of the project. Furthermore, 33% of the total identified area will be allocated for the development of a dedicated greenbelt, reinforcing our environmental commitment.
 2. That M/s. GHCL Limited is committed to developing and maintaining an average **100 m wide greenbelt** (towards Vipassana centre/Bada village) in NW and North direction facing the

entrance road. Also approximately an average **30-50 m wide greenbelt** in NE direction within the plant boundary, as per its environmental responsibility, which will be a part of total 33% greenbelt area.

3. That M/s. GHCL Limited will provide a Continuous Ambient Air Quality Monitoring Station (CAQMS) within the plant, towards the Vipassana Center, to ensure continuous monitoring and compliance.
4. That the M/s. GHCL Limited will provide an intermittent sprinkling system on both sides of the road and transportation route within plant, extending up to the storage yard, to effectively mitigate and control fugitive emissions during the transportation.
5. That the M/s. GHCL Limited ensures that paghadiya fishing activities will not be disrupted due to the project activities, during both the construction and operation phases due to micro tunnelling operation in inter-tidal zone. The company commits to taking all necessary measures to prevent any interference with local paghadiya fishing practices.
6. That the M/s. GHCL limited will install flow meters at the effluent discharge system. Also, SS monitoring system shall be installed if reliable system is available.
7. PP informed that the depth of micro-tunnelling depends on the topography. It will be approximately 14-15 meters below MSL and 5-6 meters below the seabed, extending beyond the intertidal zone.
8. The PP informed that local employment will be provided for the project as per the norms of State Government .
9. PP submitted the following revised CER activities :

Sr. No.	Type of Activities	Yearly amount to be spent in CER activities (Rs. In Crore)					Total Amount to be spent (Rs. in crore)
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	
1.	Provision of Solar light, solar panel and its maintenance in nearby villages within 10 km of study area.	0.10	0.10	0.10	0.10	0.10	0.50
2.	Infrastructure development Such as primary healthcare units and the fulfilment of the basic amenities in PHCs including mobile medical van and Provide Bala-Rasayana to Malnutrition Children in Aanganwadi and PHC of nearby Villages.	0.00	0.27	0.29	0.31	0.35	1.22

3.	Animal husbandry promotion through providing support for breed improvement, animal health care, Veterinary doctor and others as well as provides Fodder for cattle feeding nearby villages.	0.80	0.85	0.90	0.90	0.90	4.35
4.	Infrastructure development for quality of education, which will ultimately upgrade schools in nearby villages.	0.25	0.27	0.29	0.31	0.35	1.47
5.	Development Initiatives for Fishing Communities such as Creation of infrastructure like ice plants, cold storages as well as provide operational inputs such as fishing boats, nets and engines.	0.15	0.15	0.15	0.15	0.15	0.75
6.	Promoting environment friendly and nature-based solutions to enhance productivity of farming (Organic Farming) activities. It covers capacity building on farming techniques, provision of highquality seeds/manure, efficient irrigation solutions, etc.	0.60	0.60	0.60	0.60	0.60	3.00
7.	Promoting activities for skill building to improve employment opportunities and women empowerment in nearby villages.	0.45	0.45	0.45	0.45	0.45	2.25
8.	Development of facilities within nearby villages such as roads.	0.20	0.20	0.20	0.20	0.20	1.00

9.	Activities for water conservation like deepening of nearby village ponds for storage of rainwater for domestic use of villagers.	0.50	0.50	0.50	0.50	0.50	2.50
10.	Promoting plantation activities through Forests by Heartfulness Institute in nearby villages.	0.20	0.20	0.20	0.20	0.20	1.00
11.	Installation of 100 solar street lights in nearby villages, namely Bada, Janakpur, Bhinsara, Panchotiya, Layja Mota, Layja Nana, Bhada, Bayath, Mapar, Bambhadai, Modhkuba and Padamapar. (Already 200 solar lights have been considered in point no. 1)	0.05	0.05	0.05	0.05	0.05	0.25
12.	Installation of a suitable capacity Sewage Treatment Plant with proper consultation with local administration in Bada Village.	-	0.10	2	0.30	-	2.40
Total		3.30	3.74	5.73	4.07	3.85	20.69

10. PP submitted the revised capital cost and recurring cost earmarked for implementation of EMP

ASPECT OF ENVIRONMENTAL MANAGEMENT	COST IN CRORE [RS.]	RECURRING COST (CRORE /ANNUM) [RS.]	REMARKS
Air Pollution	89.28	1.50	Capital cost would include air pollution control devices like ESPs, Scrubbers, Dust extraction and suppression systems, Stacks, Dry Fog system, Wind screen and the recurring cost would include operation and maintenance of pollution control devices

Water Pollution	14	0.12	Capital cost would include cost of ETP, STP and recurring cost would include operation and maintenance of pollution control devices
Noise Pollution	2.9	0.0035	Capital cost would include providing adequate sound enclosures for TG, CO- compressor, DG Set
Hazardous / Solid Waste Management	1.05	1.10	Capital cost would include expense for providing storage area for hazardous waste and membership charges of TSDF/CHWIF Site and recurring cost would be for solid/ hazardous waste disposal charges and Sampling & analysis charges of solid waste.
Environmental monitoring Programme	3.4	1.30	Capital cost would include expense OCEMS, Online weather station, online pH, NH3-N, Temp meter and recurring cost would include monitoring and analysis of noise level., Sample analysis charges & ambient air & fugitive emission sampling & analysis charges etc., Fresh water & wastewater sample analysis charges etc. Soil: recurring cost would be for Soil Sample analysis., Marine area environment monitoring
Green Belt	20	0.5	Capital cost would include development of green belt within the project premises and recurring cost would include maintenance charges and manpower salary etc.
Renewable Energy	113	--	Capital cost would include Installation of Solar and Windmill
Fire safety & Occupational Health & Safety	3.41	0.35	Capital cost would include cost of OHS center, PPEs, fire & safety instruments and recurring cost would include maintenance charges and training, audit & health check-up etc.

Miscellaneous	53	2.66	Miscellaneous activity such as development of rain water harvesting system, Drainage Network for rain water, Environmental laboratory, Environmental Management system, miscellaneous study, statutory application fees, audit, training cost etc. and recurring cost would include biodiversity management plan, hiring of EMC and Conservation Plan for Schedule 1 species.
CER	20.69	--	Capital cost would include cost of CER activities such as promoting renewable energy, skill development Programme, Organic farming, water conservation (like village pond deepening), forestry etc. and develop infrastructure of schools, health facilities, Fishing activities, roads in nearby villages, Installation of additional solar street lights in nearby villages and Installation of a suitable capacity Sewage Treatment Plant with proper consultation with local administration in Bada Village.
Total (EMP + CER)	320.73	7.53	

23. The EAC, after detailed deliberations, recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions in Annexure-I:

- (i) PP shall ensure that recommendations of SCZMA issued vide letter dated ENV/10/2021/187/T-Cell, dated 26/12/2023 for proposed greenfield chemical complex, sea water intake and effluent disposal facilities shall be implemented. Recommendations mentioned in Marine EIA Report; Conservation Plan of Sea Turtle report; Conservation & management plan for the conservation of Significant species prepared by GUIDE, Kachchh; Conservation Plan of Sand Dune by CSIR-NIO, Mumbai.
- (ii) PP shall ensure that condition stipulated in letter dated 18.07.2023 for diversion of 0.96ha unclass forest and letter dated 4.01.2024 for final stage II.
- (iii) ESP alongwith Stack height of 130 m shall be provided to Imported Coal/Lignite/ Pet coke fired with flue gas desulphurization 150TPH CFBC Boiler (6 Nos.) to control the particulate emission as per CPCB norms. Stack height of 30 m shall be provided to 5 MvA DG set(2/3 nos). Scrubber and Dust Collector system alongwith stack height of 68 m shall be provided to Coke or Briquette or Anthracite fired lime kiln to control the particulate emission as per CPCB norms. Water scrubber system alongwith stack height of 42m shall be provided to ammonia recovery system. Bagfilter

alongwith adequate stack height shall be provided to lime grinding system/slaker. Scrubber, Bag filter shall be provided to Calciner unit. Scrubber shall be provided to Densification. Bagfilter shall be provided to Sodium bicarbonate unit. Scrubber and wet ESP shall be provided to lime kiln.

- (iv) PP shall install continuous ambient air quality monitoring station towards Vipasana Centre to monitor real time ambient air quality status of the area.
- (v) 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 servers. 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.
- (vi) Total fresh water requirement from sea water shall not exceed 14,61,038 m³/day.
- (vii) NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing of the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- (viii) Total Effluent generation shall not exceed **14,48,508 m³/day** [Domestic - **160 m³/day** + Industrial – **14,48,348 m³/day** (fresh seawater for dilution – 5,14,678 m³/day + effluent generation from soda ash & CPP plant – 1,26,830 m³/day + once through cooling – 8,07,000 m³/day)]. The industrial effluent generated i.e. from RO/DM rejects, brine purification reject, distiller waste and boiler blowdown shall be mixed with fresh seawater for dilution and wastewater from once-through cooling and treated and disposed into the Arabian Sea as per the recommendation of NIO and after achieving the prescribed norms of CPCB/SPCB. Domestic effluent (**160 m³/day**) shall be treated in sewage treatment plant and treated sewage will be reused in landscaping & gardening purposes.
- (ix) The Pipeline of seawater intake and effluent disposal shall be laid in a safe manner (using tunnelling) so that the sand dunes stretch between the plant boundary and respective land fall points are protected without any disturbance to their natural appearance and stability.
- (x) GHCL Limited shall ensure that paghadiya fishing activities shall not be disrupted due to the project activities, during both the construction and operation phases due to micro tunnelling operation in inter-tidal zone. The company commits to taking all necessary measures to prevent any interference with local paghadiya fishing practices
- (xi) PP shall ensure that no /untreated/treated water from the project site shall be discharged into seasonal water stream.

- (xii) PP shall ensure the implementation of conservation plan of Rs. 136.50 Lakhs for schedule – I species as approved by Chief Wildlife Warden, Gujarat vide letter no WLP/32/A/50-52/2023-24 dated 24.04.2023 for greenfield project of M/s GHCL at Bada Village, Mandavi, Kutch, Gujarat.
- (xiii) The PP shall develop greenbelt of at least 30-50 m width over an area of 18,02,856 m² (33%) within the project site mainly along the plant periphery, preferably within a year of the grant of EC. PP shall develop and maintain an average **100 m wide greenbelt** (towards Vipassana centre/Bada village) in NW and North direction facing the entrance road. Also approximately an average **30-50 m wide greenbelt** in NE direction within the plant boundary, as per its environmental responsibility, which will be a part of total 33% greenbelt area. The tree saplings selected for the plantation should be of sufficient height, preferably 6-ft shall be planted in greenbelt area. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP shall annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (xiv) Plantation of saplings shall be carried out as a part of tree plantation campaign "EK PED MA ke NAAM" and details of the same to be uploaded in the MeriLiFE portal (<https://merilife.nic.in>) in respect to this Ministry's OM No. IA3-22/3/2024-IA.III(E-241594) dated 24th July 2024.
- (xv) A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions and shall also engage Environment Officials. IN addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (xvi) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. The budget proposed under EMP is ₹ 320 crore (Capital cost) and ₹ 7.53 Crore per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (xvii) PP shall ensure the time bound implementation of CER activities of Rs. 20.69 Crores

- (xviii) M/s GHCL shall take up initiatives to restore the water quality of the water pond located near Vipasna Centre. M/s GHCL shall carry out tree plantation drive along road of Bada Village in consultation with Village Administration.
- (xix) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (xx) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (xxi) All the hazardous waste shall be managed and disposed as per the HWM Rules 2016. Hazardous waste such as Distillation Residue and Off Specification Products shall be either sent to common incineration site or sent for coprocessing. Solid waste shall be segregated into dry and wet garbage at site in accordance to the Solid Waste Management Rules, 2016. Wet waste shall be converted into compost and used as manure for greenbelt development. 570 MT/A Fly ash shall be stored under covered silos handed over to the Cement manufacturers/ Cement Industry.
- (xxii) Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. coal shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. Fly ash shall be collected in Silo. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.
- (xxiii) 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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms with full fledged infrastructure for truck drivers etc. Parking area should be paved to avoid fugitive dust emissions. There should be a learning centre over road behaviour for the drivers.
- (xxiv) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The occupier of new as well as expansion projects shall be required to comply with the provisions of the MSHIC Rules, 1989 including notifying their activities or seeking site approval from the concerned authorities, to address operational safety aspects. In doing so, various schedule, particularly Schedule-5 of the said rules may be referred.

- (xxv) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (xxvi) The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (xxvii) PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority
- (xxviii) PP shall set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xxix) Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (xxx) PP shall provide training to 10 local youth every quarter on environment management including air pollution control device, ETP, solid waste management, fly ash based brick manufacturing, green belt development as part of skill development programme.
- (xxxi) Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.
- (xxxii) 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.
- (xxxiii)The 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) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be fire proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xxxiv)The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

- (xxxv) The PP 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 vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.
- (xxxvi) PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.
- (xxxvii) The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

Item No. 2

Establishment of 3,00,000 KLPA capacity of Paint & 85,000 TPA Resins & Emulsion Manufacturing plant located at Plot no. 2602, GIDC Ankleshwar, Bharuch District, Gujarat – 393002, by Asian Paints - Amendment in EC

[Proposal No.: IA/GJ/IND3/301555/2023, File No.: IA-J-11011/278/2023-IA-II(I)]

1. The proposal is for the Amendment in EC for Establishment of 3,00,000 KLPA capacity of Paint & 85,000 TPA Resins & Emulsion Manufacturing plant located at Plot no. 2602, GIDC Ankleshwar, Bharuch District, Gujarat – 393002, by Asian Paints.
2. The project/activity is covered under Category 'A' of item 5 (h)- Integrated paint industry of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended).

Reason for Amendment : During the submission of EIA and EC application, there was a typing error in "Capacity" Column. Inadvertently 2 Lakh Kcal/hr was mentioned instead of 20 Kcal/hr, although other details including the fuel consumption, basis which pollution load was calculated, is correctly mentioned i.e., 120 kg/hr.

3. The PP proposed the following amendments in the EC:

Details of Configurations					
S.no	Plant/ Equipment/ Facility	Existing Configuration	Proposed Configuration	Final configuration after Corrigendum	Remarks if Any
1	Thermic Fluid Heater - 4	2	20	20	Capacity (Lakh Kcal/hr)
2	Thermic Fluid Heater - 5	2	20	20	Capacity (Lakh Kcal/hr)
3	Thermic Fluid Heater - 3	2	20	20	Capacity (Lakh Kcal/hr)
4	Thermic Fluid Heater - 6	2	20	20	Capacity (Lakh Kcal/hr)
5	Thermic Fluid Heater - 1	2	20	20	Capacity (Lakh Kcal/hr)
6	Thermic Fluid Heater - 2	2	20	20	Capacity (Lakh Kcal/hr)

Any Other Corrigendum Required				
S.no	Reference of Approved EC	Description as per Approved EC	Description as per Proposal.	Remarks
1	SEIAA/GUJ/EC/5(h)/597/2018	Capacity of Thermic Fluid Heaters (6 Numbers) = 2	Capacity of Thermic Fluid Heater (6 Numbers) = 20	EC condition A. 3 Air 22

2. **Deliberations by the EAC:**

The PP did not attend the 87th EAC meeting.

Accordingly, proposal was deferred. Thereafter, information shall be submitted online to the PARIVESH 1 portal for further consideration by EAC.

Item No. 3

Manufacturing of Synthetic Organic Chemicals (Acrylate Polymers) located at Survey No. 473 & 481, Village Borisana, Taluka Kadi, District Mehsana, Gujarat by M/s. Corel Pharma Chem Pvt. Ltd. - Amendment in Environmental Clearance

[Proposal No.: IA/GJ/IND3/298731/2023, File No.: J-11011/313/2017-IA-II(I)]

1. The proposal is for amendment in the **Environmental Clearance** granted by the Ministry vide letter no. **F. No. F. No. J-11011/313/2017-IA-II (I)** dated **27th July, 2020** and it's **transferred on dated: 18th December, 2020** for the project **M/s. Corel Pharma Chem (India) Pvt. Ltd** located at **Survey No. 453, 463 & 464, Borisana Village, Taluka: Kadi, District: Mehsana, Gujarat – 384441** in favor of **M/s. Corel Pharma Chem (India) Pvt. Ltd.**
2. The project proponent has requested for amendment in the ToR/EC with the details are as under:

Para S of EC r. issued N by MoEF &CC	Details as per the EC	To be revised as per EC-Amendment	Justificatio n/ reasons
1. Condit ion No. 2	The Ministry of Environment, Forest and Climate Change has examined the proposal for manufacturing of synthetic organic chemicals (Acrylate Polymers) of capacity 2000 TPM by M/S. Corel Pharma Chem Pvt. Ltd. in an area of 56,129 sq.m located at survey No. 473 & 481, Village Borisana, Taluka Kadi, District Mehsana (Gujarat).	The Ministry of Environment, Forest and Climate Change has examined the proposal for manufacturing of synthetic organic chemicals (Acrylate Polymers) of capacity 2000 TPM by M/S. Corel Pharma Chem (India) Pvt. Ltd. in an area of 67,800 sq.m located at Survey No. 453, 463 & 464, Borisana Village, Taluka: Kadi, District: Mehsana, Gujarat – 384441.	Additional land has been purchased only for greenbelt developme nt and parking facility.
2. Condit ion No. 4	Total land area available for the project is 56,129 sqm. Industry will develop green belt in an area of 18,750 sqm, covering 33.41% of total project area. The estimated project cost is Rs.20 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.41 lakhs and the recurring cost (operation and maintenance) will be about Rs.6.75 lakhs per annum. Employment opportunity will be for 220 persons.	Total land area available for the project is 67,800 sqm. Industry will develop green belt in an area of 22,375 sqm, covering 33% of total project area. The estimated project cost is Rs.20 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.41 lakhs and the recurring cost (operation and maintenance) will be about Rs.6.75 lakhs per annum. Employment opportunity will be for 220 persons.	Additional land has been purchased only for greenbelt developme nt and parking facility.
3. Condit ion No. 6	Total water requirement is 203 cum/day of which fresh water requirement will be 203 cum/day proposed to be met from canal of Sardar Sarovar Nigam Limited. Effluent of 13.33 cum/ day will be treated through ETP. Total water treated in MEE+ATFD 13.33 KLD condensate water will be used for green	Total water requirement is 530 cum/day out of which fresh water requirement will be 530 cum/day proposed to be met from the bore-well. Effluent of 17.2KLD will be treated through ETP. Total water of 134.7 KLD water will be evaporated in the MEE followed by ATFD, out of which 122.8 KLD condensate	Sardar Sarovar Nigam Limited (SSNL) is at a distance of

	<p>belt Development & Cooling Make up. 8 KLD will be generated from Domestic use which will be treated in STP and treated water will be used for gardening purpose. The plant will be based on Zero liquid discharge system.</p> <p>Power requirement of 2500 kVA will be met from Uttar Gujarat Vij Company limited (UGVCL). Two DG set of 250 kVA capacity & three nos. of DG sets of 500 kVA capacities will be installed and used as standby during power failure. Stack height 3 m for 250 kVA DG sets and 5 m for 500 kVA DG sets will be provided as per CPCB norms to the proposed DG sets. The unit is proposed 2 nos. of steam boilers, 2 nos. of TFH, 6 nos. of HAG. The details of boilers are as under:-</p>	<p>water will be reused in cooling – makeup and 8.7 KLD will be reused for green belt Development. 10 KLD of RO-reject water will be reused for green belt Development. 18 KLD will be generated from Domestic use which will be treated in STP and reused for gardening purpose. The plant will be based on Zero Liquid Discharge system.</p> <p>Power requirement of 2500 kVA will be met from Uttar Gujarat Vij Company limited (UGVCL). Two DG set of 250 kVA capacity & three nos. of DG sets of 500 kVA capacities will be installed and used as standby during power failure. Stack height 3 m for 250 kVA DG sets and 5 m for 500 kVA DG sets will be provided as per CPCB norms to the proposed DG sets. The unit is proposed 2 nos. of steam boilers, 1 no. of TFH. The details of boilers are as under:-</p>	<p>approximately 5-6 km from the site. A permission letter and installation would take almost 3-4 years.</p> <p>The unit has obtained a NOC for the abstraction of ground water.</p>																																																												
4.	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Details</th> <th>Capacity</th> <th>Fuel name</th> <th>Fuel quantity</th> <th>Air Pollution control Measure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Steam boiler-I</td> <td>3 TPH</td> <td>White coal/Briquettes/PNG</td> <td>3MT/Day OR 400 SC M/Day</td> <td>Multi cyclone separator / bag filter</td> </tr> <tr> <td>2</td> <td>Steam boiler-II</td> <td>3 TPH</td> <td>White coal/Briquettes/PNG</td> <td>3 MT/Day OR 400 SC M/Day</td> <td>Multi cyclone separator / bag filter</td> </tr> <tr> <td>3</td> <td>Thermal fluid heater - 1</td> <td>4 Lakhs Kcal/hr.</td> <td>HSD/LDO</td> <td>40 Lt/hr</td> <td>Adequate Stack Height</td> </tr> <tr> <td>4</td> <td>Thermal fluid</td> <td>4 Lakhs</td> <td>HSD/LDO</td> <td>40 Lt/hr</td> <td>Adequate</td> </tr> </tbody> </table>	Sr. No.	Details	Capacity	Fuel name	Fuel quantity	Air Pollution control Measure	1	Steam boiler-I	3 TPH	White coal/Briquettes/PNG	3MT/Day OR 400 SC M/Day	Multi cyclone separator / bag filter	2	Steam boiler-II	3 TPH	White coal/Briquettes/PNG	3 MT/Day OR 400 SC M/Day	Multi cyclone separator / bag filter	3	Thermal fluid heater - 1	4 Lakhs Kcal/hr.	HSD/LDO	40 Lt/hr	Adequate Stack Height	4	Thermal fluid	4 Lakhs	HSD/LDO	40 Lt/hr	Adequate	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Details</th> <th>Capacity</th> <th>Fuel name</th> <th>Fuel quantity</th> <th>Air Pollution control Measure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Steam boiler-I</td> <td>6 TPH</td> <td>White coal/Briquettes/PNG</td> <td>27 MT/Day OR 1200 SCM/Day</td> <td>Multi cyclone separator / bag filter</td> </tr> <tr> <td>2</td> <td>Steam boiler-II (Standby)</td> <td>3 TPH</td> <td>White coal/Briquettes/PNG</td> <td>3.5 MT/Day OR 400 SCM/Day</td> <td>Multi cyclone separator / bag filter</td> </tr> <tr> <td>3</td> <td>Thermal Fluid Heater</td> <td>20 Lakhs Kcal/hr</td> <td>White coal/Briquettes</td> <td>18 MT/Day</td> <td>Adequate Stack Height</td> </tr> <tr> <td>5</td> <td>DG set - 1 250</td> <td>250 KVA</td> <td>HSD</td> <td>40 Lt/hr</td> <td></td> </tr> </tbody> </table>	Sr. No.	Details	Capacity	Fuel name	Fuel quantity	Air Pollution control Measure	1	Steam boiler-I	6 TPH	White coal/Briquettes/PNG	27 MT/Day OR 1200 SCM/Day	Multi cyclone separator / bag filter	2	Steam boiler-II (Standby)	3 TPH	White coal/Briquettes/PNG	3.5 MT/Day OR 400 SCM/Day	Multi cyclone separator / bag filter	3	Thermal Fluid Heater	20 Lakhs Kcal/hr	White coal/Briquettes	18 MT/Day	Adequate Stack Height	5	DG set - 1 250	250 KVA	HSD	40 Lt/hr		<p>Higher Kcal/hr Thermic Fluid Heater (TFH) is to be installed to make up for the 6 Hot Air Generators (HAGs) which are desired to be removed. One TFH supplying heat to various locations would be more efficient as compared to 6 HAGs at 6 different locations.</p> <p>White coal (agricultural briquette) which is a renewable source of</p>
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heat er -2	Kcal /hr.			Stack Height	KV A					energy) is to be used as a fuel in the 20 Kcal/hr TFH. This would in turn replace diesel that was proposed to be used in each of the separate HAGs at various locations.
5	DG set - 1 250 KV A	250	HSD	40 Lt/hr	250	HSD	40			
6	DG set - 2 250 KV A	250	HSD	40 Lt/hr	500	HSD	80			
7	DG set - 3 500 KV A	500	HSD	80 Lt/hr	500	HSD	80			
8	DG set - 4 500 KV A	500	HSD	80 Lt/hr	500	HSD	80			
9	DG set - 5 500 KV A	500	HSD	80 Lt/hr	The stack height of boiler will be 30 m, TFH 11 m, and DG set 3-5m. There is no process emission from manufacturing processes.					
10	Hot Air Generator -1	500 Kg/hr.	HSD/LDO	100 Lt/hr						
11	Hot Air Generator -2	500 Kg/hr.	HSD/LDO	100 Lt/hr						
12	Hot Air Generator -3	400 Kg/hr.	HSD/LDO	90 Lt/hr						
13	Hot Air Generator -4	400 Kg/hr.	HSD/LDO	90 Lt/hr						
14	Hot Air Gen	400 Kg/hr.	HSD/LDO	90 Lt/hr						

		erato r -5						
	1 5	Hot Air Gen erato r -6	400 Kg/ hr.	HSD/LD O	90 Lt/hr			
	The stack height of boiler will be 30 m, TFH 11 m, HAG 5 m and DG set 3-5m. There is no process emission from manufacturing processes.							
5.	Condit ion No. 12	The recommendation of Expert Appraisal Committee has been examined in the Ministry. Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project for manufacturing of synthetic organic chemicals (Acrylate Polymers) of capacity 2000 TPM by M/s Corel Pharma Chem Pvt. Ltd., located at Survey No. 473 & 481, Village Borisana, Kadi Thol Road, Kadi, District Mehsana (Gujarat), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to the compliance of the terms and conditions as under:-				The recommendation of Expert Appraisal Committee has been examined in the Ministry. Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project for manufacturing of synthetic organic chemicals (Acrylate Polymers) of capacity 2000 TPM by M/s Corel Pharma Chem (India) Pvt. Ltd., located at Survey No. 453, 463 & 464, Borisana Village, Taluka: Kadi, District: Mehsana, Gujarat – 384441, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to the compliance of the terms and conditions as under:-		
6.	Specif ic Condit ion No. VIII	Total fresh water requirement shall not exceed 203 cum/day, proposed to be met from canal of Sardar Sarovar Nigam Limited. Prior permission in this regard shall be obtained from the concerned regulatory authority. No ground water shall be used.				Total fresh water requirement shall not exceed 530 KLD, proposed to be met from the borewell. Prior permission in this regard shall be obtained from the concerned regulatory authority.		Sardar Sarovar Nigam Limited (SSNL) is at a distance of approximately 5-6 km from the site. A permission letter and installation would take almost 3-4 years.

Deliberations of the EAC:

- i. The committee noted that the PP has not submitted the copy of land ownership in the name of project proponent. The committee suggested to submit specific land ownership document indicating the land is owned by the M/s. Corel Pharma Chem Pvt. Ltd. The committee will appraise the entire proposal after submission of the land ownership document in the name of M/s. Corel Pharma Chem Pvt. Ltd.

Accordingly, proposal was deferred for want of above said information. Thereafter, information shall be submitted online to the PARIVESH portal for further consideration by EAC.

Any Other Item

Item No. 4

Setting up of pesticides and pesticide specific intermediates & Synthetic Organic Chemicals manufacturing plant with total production capacity 431161 TPA, Co product 10480 TPA and CPP of 4.9 MW capacity located at Plot no. 41/1 & 41/2, GIDC Notified Industrial Estate, Jhagadia, District Bharuch, Gujarat by M/s Aarti Industries Limited - Merging of two Environmental Clearances

[Proposal No.:- IA/GJ/IND3/291239/2022]

The proposal is regarding amalgamation of two Environmental Clearances of adjacent units of Aarti Industries Limited i.e. Aarti Industries Limited (Unit-IV) at Plot No: 41/2 and Aarti Industries Limited at Plot No: 41/1 located in Notified Industrial Estate of Jhagadia, Gujarat. Aarti Industries Limited (Unit IV) has obtained EC from SEIAA vide EC No. SEIAA/GUJ/EC/5(f)/1204/2022 dated 17th May 2022 for setting up manufacturing plant of “Synthetic Organic Chemicals” at Plot no. 41/2, GIDC Notified Industrial Estate, Jhagadia. Ta- Jhagadia, Dist- Bharuch. 3.

The proposal was considered 69th EAC meeting held on 17.11.2023 and the EAC recommended for amalgamation of two Environmental Clearances of adjacent units of Aarti Industries Limited.

Further The proposal was considered by EAC (Industry -3) in its 87th meeting held on 21st October, 2024.

Deliberations of the EAC

PP informed that after the merger of the two adjacent units for which ECs were obtained i.e. (1) EC no. SEIAA/GUJ/EC/(f)/1204/2022 dated 17.05.2022 and (2) EC no. IA-J-11011/458/2021-IA-II(I) dated 08.06.2022, the name of merged unit will be M/s. Aarti Industries Limited, Plot No. 41/1 & 41/2, GIDC Notified Industrial Estate, Jhagadia, Dist Bharuch, Gujarat. The ownership will remain with M/s. Aarti Industries Limited with the same CIN no.

The responsibility w.r.t. environmental safeguards and other legal requirements will be with M/s. Aarti Industries Limited, Plot No. 41/1 & 41/2, GIDC Notified Industrial Estate, Jhagadia, Dist Bharuch, Gujarat.

In view of the above, the Committee recommended subject to submission of undertaking stating that All the environmental liabilities after merger of ECs, i.e., (i.) EC no. SEIAA/GUJ/EC/(f)/1204/2022 dated 17.05.2022 and (ii) EC no. IA-J-11011/458/2021-IA-II(I) dated 08.06.2022 *if any* shall be borne by M/s. Aarti Industries Limited and compliance obligations w.r.t. all the conditions stipulated in the both the ECs shall be complied by M/s. Aarti Industries Limited.

GENERAL EC CONDITIONS

- No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- The PP shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
- The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- A copy of the clearance letter shall be sent by the PP to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- The PP shall also upload/submit six monthly reports on PARIVESH Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.
- The PP shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

List of the Expert Appraisal Committee (Industry-3) members participated in Day - I during Video Conferencing (VC) meeting

S. No.	Name of Member	Designation
1.	Prof. (Dr.) A.B. Pandit	Chairman
2.	Dr. Suresh Panwar	Member
3.	Dr. (ER.) Dibakar Swain	Member
4.	Shri Dinabandhu Gouda	Member
5.	Dr. Kishore Malviya	Member
6.	Shri Amit Vashisht	Member
7.	Dr. P. Jagannadha Rao	Member
8.	Dr. Vijay S Moholkar	Member
9.	Prof. Suneet Dwivedi	Member
10.	Shri A N Singh	Member Secretary
MoEFCC		
1.	Dr. Kanchan Puri	Scientist-B
2.	Dr. Bhawana Kapkoti Negi	Technical Officer

MoM approved by

(Prof. Aniruddha B. Pandit)
Chairman