GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION – INDUSTRY - 3 SECTOR)
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Dated: 06.05.2025

MINUTES OF THE 99th EXPERT APPRAISAL COMMITTEE (INDUSTRY- 3 SECTOR) MEETING HELD ON 29-30th April, 2025

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 98th EAC Meeting held on 7-8th April, 2025

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.

Agenda No. 99.1

Proposed expansion of Marine Chemicals, Fertilizers with addition of Captive Co-Gen Power Plant at Greater Rann of Kutch, Nr. Village Dhordo, Tal: Bhuj, Dist. Kutch, Gujarat by M/s. Agrocel Industries Pvt. Ltd. – Reconsideration 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 seeking Environmental Clearance of the project for expansion of existing production of Marine Chemicals, Fertilizers from 5295 MTPM to 113908 MTPM along with addition of 25.6 MW Captive Co-Gen Power Plant (CPP) located at Greater Rann of Kutch, Nr. Village Dhordo, Tal: Bhuj, Dist. Kutch, Gujarat by M/s. Agrocel Industries Pvt. Ltd.
2. Standard ToR has been issued by Ministry vide letter No. IA-J-11011/269/2020-IA-II-(I); dated 07.11.2020.
3. The project is covered under the Category A of item 5(a) and 1(d) of the Schedule of Environmental Impact Assessment (EIA) Notification, 2006 and amended from time to time since the project site is located outside notified industrial area.
4. EC is not applicable to the existing project activity hence not obtained EC for existing set up.

5. The project proposal was considered by the Expert Appraisal Committee (Industry-3) in its 44th , 46th and 99th meeting held on 19.12.2023, 30.01.2023 and 30.04.2025 respectively wherein, the Project Proponent and the accredited Consultant namely M/s. San Envirotech Pvt. Ltd., Ahmedabad (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 that:

6. Existing land area is 112350851.43 m^2 (27762.5 Acres), which is lease land. Out of which, 366650 m^2 land for the project and Rest of land is for salt recovery given by the Government of Gujarat on lease. No additional land will be required for proposed expansion. Expansion will be done within the existing unit.

Details/Status of Land Ownership/Land Possession:

SN	Plot no./ Survey no./Gat no.	Plot area (sq. m.)	Date of land allotment (if applicable)	Date of land Possession (if applicable)	Date of lease/sale deed/ land transfer (if applicable)	Validity of lease/sale deed or possession certificate	Name on the lease/sale deed Or allotment /possession certificate
1	Un-Surveyed Lease Land	112350851.43	Greater Rann of Kutch, Near Village Dhordo, Taluka Bhuj, District Kutch-10,000 Acres	05.11.1993	15.11.1993	30 years	Agrocel Industries Pvt. Ltd.
2			Village Dhordo, Greater Rann of Kutch -16,727.5 Acres	20.06.2011	20.06.2011	Under renewal	Agrocel Industries Pvt. Ltd.
3			Village Dhordo, Greater Rann of Kutch - 1,035 Acres	11.07.2017	11.07.2017	10 years	Agrocel Industries Pvt. Ltd.

AND

Involvement of forest land: No involvement of Forest land

Name of Authority transferring the Land: Govt. of Gujarat

7. The details of products and capacity are as under:

S. N.	Name of the Products	CAS No.	Existing Quantity	Proposed Quantity	Total Quantity	Uses	Type of products	Schedule as per EIA Notification, 2006
1	Liquid Bromine	7726-95-6	4000	4333	8333	Chemical industry	Inorganic Chemical	Non-EC
2	48% Hydrobromic Acid	10035-10-6						

3	Calcium Bromide (52%)/ **Solid Powder**	7789-41-5						
4	Phosphorus Tribromide	7789-60-8	15	10	25	Chemical industry	Inorganic Chemical	Non-EC
5	Sodium Bromide (45%)/ **Solid Powder**	7647-15-6	150	1437	1667	Chemical industry	Inorganic Chemical	Non-EC
6	Zinc Bromide (77%)	7699-45-8	80					
7	Lithium Bromide	7550-35-8	0.0					
8	Potassium Schoenite ($K_2SO_4.MgSO_4.6H_2O$)	7447-40-7 5	750	28833	29583	Agriculture	Fertilizer	5(a)
9	Syngenite ($K_2SO_4.CaSO_4.H_2O$)	13780-13-7						
10	Sulphate of Potash	7778-80-5	0.0				Fertilizer	5(a)
11	Potassium Nitrate	7757-79-1	0.0				Fertilizer	5(a)
12	Magnesium Sulphate ($MgSO_4$)	7487-88-9	0.0				Fertilizer	5(a)
13	Magnesium Chloride ($MgCl_2$)	7786-30-3	300	57333	57633	Chemical industry	Inorganic Chemical	Non-EC
	Magnesium Hydroxide $Mg(OH)_2$	1309-42-8					Inorganic Chemical	Non-EC
	Magnesium Oxide (MgO)	1309-48-4					Inorganic Chemical	Non-EC
14	Enriched Mineral Salt Mix	--	0.0	16667	16667	Chemical industry	Inorganic Chemical	Non-EC
15	Captive Co-Gen Power Plant (6.4 MW x 4 nos.)	--	--	25.6 MW	25.6 MW	Captive power use	Power Plant	1(d)
Total			**5295**	**108613**	**113908**			

8. Certified Compliance Report of existing CTO is obtained from GPCB-Head Office, Gandhinagar vide letter no. PC/CCA-Kutch-53(9)/GPCB ID-17747/851096, dated 10.01.2025. It is reported that PP has complied with all the conditions.

9. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Pond of Dhordo Village is at a distance of 4.6 km in SE direction from project site. There is one Schedule-I Species found in 10 km radius namely Indian Peafowl (Pavo Cristatus). Conservation plan is submitted to the Deputy Conservator of Forest, Bhuj-Kutch with an allocated budget of Rs. 920000/-. Approval is awaited.

Details of project site proximity (in km) to sensitive areas:

• Habitation	Udhmo Village ~2.32 km
• School	Dhordo Primary school, about 5.72 km
• River/Water body	Dhordo Village Pond: ~4.6 km

• Hospital	Dhordo Hospital 5.45 km
• Forest	None within study area of 10 km radius
• Archaeological Survey of India (ASI) protected site	None within study area of 10 km radius
• Any other	
State Highway	SH-45 (Bhuj to Khavda) ~ 26.0 km

Details of existing EC, CTO, CTE:

EC: EC is not applicable to the existing project activity, hence not obtained EC

CTO: CTO is obtained from GPCB vide order no. AWH-129380, dated 29.09.2023 valid up to 18.07.2028

Details of nearby ESZ/CRZ: No ESZ and CRZ within 10 km radius

Distance of project site from nearby ESZ/CRZ: ESZ of Narayan Sarovar Sanctuary ~90 km and CRZ IB is about 31 km (Gulf of Kutch)

10. Ambient air quality monitoring was carried out at 8 locations during October, 2020 to December, 2020 and the baseline data indicates the ranges of concentration as: PM_{10} (54.7 - 66.1 µg/m^3), $PM_{2.5}$ (32.5 - 38.9 µg/m^3), SO_2 (8.1 - 12.7 µg/m^3), NOx (12.3 - 15.7 µg/m^3). AAQ modeling study for point source emission indicated that the maximum incremental GLCs after the proposed project would be 10.68 µg/m^3, 5.284 µg/m^3, 4.147 µg/m^3, 0.226 µg/m^3, 0.226 µg/m^3 and 1.131 µg/m^3 with respect to PM_{10}, SO_2, NOx, Br_2, Cl_2, HBr. The resultant concentrations are within the national ambient air quality standards (NAAQS).

11. Total water requirement is 26287 m^3/day, of which fresh water requirement of 22378 m^3/day will be met from desalination of Sea water and rejected Brine water. 3909 m^3/day will be recycled/treated water.

12. Total industrial effluent generation will be 460852 KLD, of which 3858 KLD will be close loop recycle. Hence actual industrial w/w generation will be 456994 KLD. Source of wastewater generation will be process effluent 453712 KLD (Process Brine W/w 435559 + others 18153 KLD), Scrubber (80.0 KLD), stripper washing (1402 KLD), cooling bleed off (150 KLD), boiler blow down (1328 KLD), RO Reject (2380 KLD), Water with Lime slurry (1800 KLD). Trade effluent will be treated into 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 products. Generated 51 KLD of domestic wastewater/sewage will be treated in STP and treated sewage will be reused in greenbelt.

13. Rainwater storage tank capacity: 5 x 200 KL.

14. Power requirement after expansion will be 92000 KVA and will be partially met from PGVCL (Paschim Gujarat Vij Company Limited) and partially by Captive Co-gen Power Plant of 25.6 MW. Existing unit has 3 DG sets of 320 kVA, 200 kVA and 82.5 kVA capacity. After expansion, unit proposed to add 3 more DG Sets of 500 kVA x 3 nos. DG sets are used as standby during

power failure. Stack (height 12 m and 21 m) will be provided as per CPCB norms to the proposed DG sets.

15. Existing unit has one common stack of 2 nos. of Lignite/Imported Coal fired Boilers (6.0 TPH and 18 TPH), one stack of LDO/HSD fired Boiler (8 TPH), 2 stacks of Wood/Lignite/Imported coal fired Hot Air Generators (2.5 lakh kcal/hr. and 4 lakh kcal/hr.). Multi cyclone Bag filter, water scrubber is installed as APCM on Boiler of 6 TPH, ESP and water scrubber on Boiler of 18 TPH, Dust Collector followed by cyclone separator on LDO/HSD fired boiler. Dust Collector is installed on Hot Air Generators. After expansion, 5 stacks of coal fired Boilers, 6 stacks of coal fired Hot Air Generators will be added. ESP + Wet scrubber will be installed as APCM to Boilers. Cyclone Separator & Bag filter will be installed as an APCM on HAG to achieve the emission norms. Stack with adequate stack height will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm^3 for the proposed utilities. **Total Flue stacks after expansion will be 18 nos. (Existing: 6 nos. + Additional: 12 nos.).**

16. Details of flue gas stacks are given below.

Flue Gas stacks

Sr. No.	Stack attached to	Fuel Type	Stack Height (m)	APC measures	Probable Emission
Flue Gas Stacks-Existing					
1.	Boiler-1 (6.0 TPH)	Lignite/ Imported Coal 26.4 TPD	40	Multi cyclone Bag filter, water scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
2.	Boiler-2 (18 TPH)	Lignite/ Imported Coal 79.2 TPD	44	ESP and water scrubber	
3.	Boiler-3 (8 TPH)	LDO/HSD 16.8 TPD	30	Dust Collector followed by cyclone separator	
4.	Hot Air Generator-1 (2.5 lakh kcal/hr.)	Wood/Lignite/ Imported coal 7.2 TPD	11	Dust Collector	
5.	Hot Air Generator-2 (4 lakh kcal/hr.)		15	Dust Collector	
6.	DG Set-1, 2 & 3 (320 KVA, 200 KVA and 82.5 kVA) (Stand By)	HSD 245 lit/hr.	12	Adequate stack height	
Flue Gas Stacks-Proposed					
1.	Boiler-4 (30 TPH) (non-salt-based products)	Coal 131 TPD	47	ESP + Wet scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
2.	Boiler-5 (45 TPH) (salt-based products)	Coal 197 TPD	51	ESP + Wet scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
3.	Boiler-6 (45 TPH) (salt-based products)	Coal 197 TPD	51	ESP + Wet scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm

4.	Boiler-7 (45 TPH) (salt-based products)	Coal 197 TPD	51	ESP + Wet scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
5.	Boiler-8 (45 TPH) (salt-based products)	Coal 197 TPD	51	ESP + Wet scrubber	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
6.	Hot Air Generator-3 (non-salt-based products) (5 Lakh kcal/hr.)	Coal 2 TPD	24	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
7.	Hot Air Generator-4 (salt-based products) (4 Lakh kcal/hr.)	Coal 1.6 TPD	24	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
8.	Hot Air Generator-5 (salt-based products) (50 Lakh kcal/hr.)	Coal 26 TPD	30	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
9.	Hot Air Generator-6 (salt-based products) (50 Lakh kcal/hr.)	Coal 26 TPD	30	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
10.	Hot Air Generator-7 (salt-based products) (50 Lakh kcal/hr.)	Coal 26 TPD	30	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
11.	Hot Air Generator-8 (salt-based products) (50 Lakh kcal/hr.)	Coal 26 TPD	30	Cyclone Separator & Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm
12.	DG Set-4, 5 & 6 (500 kVA x 3 nos.)	Diesel 630 lit/hr.	30	Adequate stack height	PM: 150 mg/Nm^3 SO_2: 100 ppm NO_x: 50 ppm

17. Details of fuel:

Details of fuel consumption

Sr. No.	Name of Fuel	Fuel Consumption		
		Existing	Proposed addition	Total
1	Lignite/Imported Coal	105.6 TPD	--	105.6 TPD
2	LDO/HSD	16.8 TPD	--	16.8 TPD
3	Wood/Lignite/Imported coal	7.2 TPD	--	7.2 TPD
4	Coal	--	1026.6 TPD	1026.6 TPD
5	HSD	245 lit/hr.	630 lit/hr.	875 lit/hr.

18. Details of Process emissions generation and its management:

At present, process gas emission is from stack attached with Bromine Plant-1. Process Stack is equipped with Water and Alkali scrubber. After expansion, process emissions will be from one vent of Bromine plant-2, 16 vents of Bromine Stripping plants, 3 vents of Air dryer for $CaBr_2$, NaBr, LiBr, 5 vents of 5 nos. of Rotary dryers (of Inorganic fertilizer) and one vent of Calciner (for MnO Plant). Vent of Bromine Plant-2 will be equipped with Water and Alkali Scrubber. 2

stage Alkali Scrubber will be installed on Bromine stripping plants and bag filter on vent of Air dryer, Rotary dryers and Calciner. **Total process stacks after expansion will be 27 nos. (Existing: 1 no. + Additional: 26 nos.).**

Details of process gas stacks are given below:

Process Gas stacks

Sr. No.	Stack attached to	Stack Height (m)	APC measures	Probable Emission
Process Gas Stacks –Existing				
1.	Bromine plant-1	20	Water and Alkali Scrubber	Br_2: 2 mg/Nm^3 Cl_2: 9 mg/Nm^3 HBr: 30 mg/Nm^3
Process Gas Stacks –Proposed				
1.	Bromine plant-2	20	Water and Alkali Scrubber	Br_2: 2 mg/Nm^3 Cl_2: 9 mg/Nm^3 HBr: 30 mg/Nm^3
2.	Bromine Stripping plant-3	20	2 stage Alkali Scrubber	
3.	Bromine Stripping plant-4	20	2 stage Alkali Scrubber	
4.	Bromine Stripping plant-5	20	2 stage Alkali Scrubber	
5.	Bromine Stripping plant-6	20	2 stage Alkali Scrubber	
6.	Bromine Stripping plant-7	20	2 stage Alkali Scrubber	
7.	Bromine Stripping plant-8	20	2 stage Alkali Scrubber	
8.	Bromine Stripping plant-9	20	2 stage Alkali Scrubber	
9.	Bromine Stripping plant-10	20	2 stage Alkali Scrubber	
10.	Bromine Stripping plant-11	20	2 stage Alkali Scrubber	
11.	Bromine Stripping plant-12	20	2 stage Alkali Scrubber	
12.	Bromine Stripping plant-13	20	2 stage Alkali Scrubber	
13.	Bromine Stripping plant-14	20	2 stage Alkali Scrubber	
14.	Bromine Stripping plant-15	20	2 stage Alkali Scrubber	
15.	Bromine Stripping plant-16	20	2 stage Alkali Scrubber	
16.	Bromine Stripping plant-17	20	2 stage Alkali Scrubber	
17.	Bromine Stripping plant-18	20	2 stage Alkali Scrubber	
18.	Air dryer for $CaBr_2$ solid	25	Bag filter	PM <45 mg/Nm^3

19.	Air dryer for NaBr solid	25	Bag filter	PM <45 mg/Nm^3
20.	Air dryer for LiBr	25	Bag filter	PM <45 mg/Nm^3
21.	Rotary dryer 1 (for SOPM - Schoenite)	15	Bag filter	PM <45 mg/Nm^3
22.	Rotary dryer 2 (for SOP - Sulphate of potash)	15	Bag filter	PM <45 mg/Nm^3
23.	Rotary dryer 3 (for Syngenite)	15	Bag filter	PM <45 mg/Nm^3
24.	Rotary dryer 4 (for $MgSO_4$)	15	Bag filter	PM <45 mg/Nm^3
25.	Rotary dryer 5 (for $(MgOH)_2$)	15	Bag filter	PM <45 mg/Nm^3
26.	Calciner (for MgO)	25	Bag filter	PM <45 mg/Nm^3

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

All the **Hazardous waste** shall be managed and disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Neutralizer sludge will be reused in Syngenite & Potassium Schoenite. Discarded Containers/Liner/Bags will be disposed by selling to authorized recyclers. Used Oil will be disposed by selling to registered re-processor. Spent H_2SO_4 (70-75%) will be used for captive consumption.

Solid waste shall be managed and disposed as per the Solid Waste Management Rules, 2016. Fly ash will be collected, stored in silo and sell to brick manufacturers or cement industries. Garbage will be segregated into wet and dry waste. Wet garbage will be converted into compost and utilize for greenbelt.

Details of hazardous wastes are given below:

Sr. No.	Name of waste	Category as per Haz. Rule, 2016	Source	Qty.			Disposal method
				Existing	Proposed addition	Total after expansion	
1.	Neutralizer sludge	35.3	Neutralizer	00	700000 MT/year	700000 MT/year	Collection, Storage, and reuse in Syngenite & Potassium Schoenite
2.	Discarded Containers/Liner/Bags	33.1	Material storage	500 Nos./Yr. 5 MT/Year	1500 Nos./Yr. 15 MT/Year	2000 Nos./Yr. 20 MT/Year	Collection, Storage, Decontamination, Transportation, Disposal by selling to Authorized Recycler
3.	Used Oil	5.1	Driving units	1 MT/Year	4 MT/Year	5 MT/Year	Collection, Storage, Transportation, Disposal by selling to Registered Reprocess
4.	Spent H_2SO_4	C2	From Product	4800	46,000 MT/Year	50,800 MT/Year	Collection, Storage, Transportation and

	(70-75%)		Bromine and 48% Hydro Bromic Acid	MT/Year			captive consumption

Details of other wastes (non-hazardous) management

Sr. No.	Name of non-hazardous Waste	Source of generation	Quantity (MTPA)	Management
1.	Fly Ash	Boiler	35880	Collection, stored in silo and sell to brick manufacturer or cement industries
2.	Garbage	Domestic	65.0	Garbage will be segregated into wet and dry waste. Wet garbage will be converted into compost at project site and compost shall be utilized for greenbelt.
3.	STP sludge	STP	6.0	Used as manure within premises.

Interim storage area for Hazardous waste (sq. m.): 76403 m^2

20. Public Hearing for the expansion project has been conducted by the Gujarat Pollution Control Board on 25.08.2021. Public hearing notice was published on date 22.07.2021 in 2 nos. of prominent newspapers namely Divya Bhaskar (Gujarati) and The Times of India (English). The Public Hearing was attended by 102 nos. of persons. Public hearing was conducted at Dhordo Resort (Gateway of ran resort), Gram Panchayat of Dhordo, Village: Banni, Taluka: Bhuj, Kutch on date 25.08.2021 presided by the following presiding officers Shri Kuldipsinh Jhala, GAS (Resident Additional Collector and Additional District Magistrate) and Shri T. C. Barmeda (Regional Officer, GPCB, Kutch-West and representative of Member Secretary GPCB).

Public consultation:

i. **Details of advertisement given**: Date of advertisement: 22.07.2021, Name of newspaper: Divya Bhaskar (Gujarati) and The Times of India (English)
ii. **Date of public consultation:** 25.08.2021
iii. **Venue of public consultation:** Dhordo Resort (Gateway of ran resort), Gram Panchayat of Dhordo, Village: Banni, Taluka: Bhuj, Kutch
iv. **Designation of Presiding Officer:** Shri Kuldipsinh Jhala, GAS (Resident Additional Collector and Additional District Magistrate) and Shri T. C. Barmeda (Regional Officer, GPCB, Kutch-West and representative of Member Secretary GPCB).
v. **Whether the commitments in public hearing form part of specific conditions/ EMP as per MoEF&CC OM dated 30/09/2020 and 25/02/2021:** Unit has committed Rs. 187.5 Lakhs to spent as CER activity

The main issues raised during the public hearing are related to:

Issue Raised	Response/Commitment from project proponent	Action plan with time frame	Budget Allocation
• Agrocel has constructed many toilet blocks in our village but toilets in some of the homes are still not made. • Our village has 700-800 families. Our request is to re-survey & construct balance toilets.	• Representative of the Company informed that we will actively consider your representation and after re-survey, necessary action will be taken done under the CSR budget.	Immediately along with project work	Unit has earmark **Rs. 187.5 Lakhs** amount for CER part of CER amount (**30 Lakhs**) will be used for sanitation facility in surrounding village.
• Company has done many appreciated works in our village. Pond deepening done by the Company as part of CSR, but in view of low rains this year, we request the Company to construct Percolation wells so that scarcity of drinking water is mitigated during drought. In case of additional water requirement, same may be fulfilled by deploying water tankers.	• Representative of the Company informed that we are always with the villagers and in times of need will always be with you. • In the new ponds that have been made, a percolation well will make it potable. In case of paucity of drinking water, we will try to deploy water tankers.	On-going work	Unit has earmark **Rs. 187.5 Lakhs** amount for CER part of CER amount (**30 Lakhs**) will be used for develop water harvesting facility in surrounding village.
• In our village, we have drinking water facility. However, we hope that the Company will help us for drinking water in summer by constructing percolation wells.	• Representative of the Company stated that the water problem is nature dependent and that the Company will collaborate with the local authorities to alleviate this problem to the best of its capability.	On-going work	A part of CSR activities
• The Company has done good work & provided employment. • Our request is specially for a permanent well for drinking water.	• Representative of the Company informed that we will help construct percolation wells to alleviate this problem.	On-going work	Unit has earmark Rs. **187.5 Lakhs** amount for CER part of CER amount (**30 Lakhs**) will be used for develop water harvesting facility in surrounding village.

21. **Details/Status of approved Water Supply Permission: Source of water is sea water and no need to get permission as it is collected during the high tide period.**

22. **Details/Status of approved Wildlife Conservation Plan:**
There is one Schedule-I Species found in 10 km radius namely Indian Peafowl (Pavo Cristatus). Conservation plan is submitted to the Deputy Conservator of Forest, Bhuj-Kutch with an allocated budget of Rs. 920000/-.

23. Industry has developed greenbelt in an area of 27% i.e. 99812 m^2 within factory premises and 7% i.e. 25665 m^2 in surrounding and approach road of project site. The industry will plant 258951 nos. of tree saplings.

24. Total Employment will be 600 Persons after expansion. Industry proposes to allocate Rs. 1.875 Crore @0.75% of project expansion cost towards Corporate Social Responsibility.
25. The estimated project cost is Rs. 600 Crore including existing investment of Rs. 350 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 9.012 Crore and the Recurring cost (operation and maintenance) will be about Rs. 1.095 Crore per annum. The breakup of capital and recurring cost is as follows:

S. N.	Activity	Approximate Capital Cost (Rs. in Lakhs)	Approximate Recurring Cost per annum (Rs. in Lakh)	Basis for cost estimate
1	Air pollution control	150	25	Capital cost will include installation of stack, air pollution control system, D.G Set, recurring cost for operation & maintenance cost
2	Water pollution control	250	45	Capital cost includes Installation cost of ETP, Evaporation Pond, STP and recurring cost include maintenance charges, operation cost of EMS, manpower salary
3	Noise pollution control	2.0	0.5	Capital cost includes providing acoustic enclosure, silencer, Anti-Vibration pads, maintenance cost, Noise PPEs
4	Solid and hazardous waste management	12.5	5.0	Capital cost would include providing of hazardous and solid waste storage area and recurring cost would include waste handling, transportation and disposal cost
5	Environment monitoring and management	5.0	4.5	Safety audit, Third party environment monitoring, sample collection and analysis charges
6	Green belt	30	5.0	Capital cost will include cost of trees, plantation cost,

				soil/manure charges and maintenance charges include manpower salary, watering of plants, replacement of any dead plant etc.
7	Fire & Safety	185	15	Capital cost includes cost of firefighting system, fire water storage tank, jockey pump, Fire Extinguisher, Fire Hydrant Post, Hose Pipe, PPEs, Fire Proximity Suit, safety shower, mock drills, etc. and recurring cost would include maintenance cost
8	Occupational health (OHC)	25	5.0	Capital cost include cost of OHC, OHS training of staff, PPE, first aid facility and recurring cost will include maintenance of equipment in OHC, Health check-up of workers
9	CER Activity	187.5	--	Fund allocation for CER activities
10	Cost of conservation plan of Schedule-I species, if any	9.20	--	Budget for conservation of Schedule-I species – Indian Peafowl
11	Rain Water Harvesting System	45.0	4.5	Rain Water Harvesting Structure
Total		**901.2**	**109.5**	

S. N.	Particular	Activity	Amount allocated in Rs.
1.	Total Cost	Construction cost, Installation of plant & machineries, Installation of Environmental Management System, Utility, Miscellaneous	600 Crore
2.	EMP Cost	Installation of EMS (Air, Water, Haz waste storage facility), Env. Laboratory, Rain Water Harvesting system, Greenbelt development	Rs. 9.012 Crore
3.	Recurring Cost	Operational and Maintenance cost of EMS (ETP, APCM & waste disposal), maintenance	Rs. 1.095 Crore/Annum

		of rain water harvesting structure, Environmental monitoring, Health check-up of workers, PPE to workers	
4.	CER Cost	Primary Infrastructure including Road approach Road of Villages, Water Harvesting Activities at village area, Greenbelt Development at Common place of villages, Additional Medical Equipment provide to Primary Health centre of sturdy area	Rs. 1.875 Crore
5.	Land	Open Land in existing set up will be utilized for proposed expansion project	0 (as lease Land)
6.	PH Commitment	--	--
7.	Greenbelt	**Capital:** Land development, Plantation cost, Fertilizer **Recurring:** Manpower, Fertilizer	Capital: Rs. 30 Lakhs Recurring: Rs. 5.0 lakhs/annum
8.	Conservation Plan	Budget for Conservation of Schedule-I Bird Species - Peacock or Indian Peafowl (Pavo Cristatus)	Rs. 9.2 Lakhs
10.	Water Approval	--	-
11.	Critical issues related to the project, if any	No any critical issues related to the project	--

26. **Deliberations by the EAC:**

The following points were discussed in the meeting:

1. PP obtained CCR vide letter dated 10th January 2025 wherein 57 points were complied and 23 points were agreed to comply by PP.
2. PP informed that they are not directly withdrawing sea water from sea but pumping saline water from ponds (filled during the high tide) which are generated after salt recovery located at a distance of around 18 to 22 km away from the project area. No intake permission is required since the pumping station is located in the land leased by the PP.
3. PP also reported that the fresh water requirement will be met from desalination of sea water and rejected brine water will be used as raw material for bromine recovery. During the high tide, salt producers collect sea water in salt pan. During this process, sea water is evaporated and concentered and the salt get precipitated. The brine water density increases (Concentrated Brine) having majorly Magnesium Bromide and Magnesium chloride content discharge outside the salt pan. This concentrated brine is collected in the collection sump by gravity and pumped for bromine recovery.
4. PP submitted an undertaking stating that there is no court case against the project.
5. PP also submitted an undertaking stating there is no legal dispute regarding land allotment and possession.
6. PP also submitted revised action plan for issues raised during the public hearing regarding anticipated pollution issues.
7. PP informed that Conservation plan vide letter dated 22.10.2024 is submitted to the Deputy Conservator of Forest, Bhuj-Kutch with an allocated budget of Rs. 920000/-.

8. PP submitted valid CTO dated 29.09.2023 issued by GPCB which is valid till 18.07.2028.
9. PP submitted the copy GCZMA recommendations letter no File No Env-10-2023-32-T dated 30.09.2023 stating that the matter was discussed in the 67th meeting of GCZMA held on 04.08.2023 and decided to get report from District Level Coastal Zone Management Committee, Kutch. DLC Kutch has provided its opinion that " As per superimposed CRZ map having sheet no G 42 V4/SE approved CZMP -2011 of District Kutch, it can be concluded that M/s Agrocel Industries is approx. 23.5 km away from CRZ area and does not require CRZ Clearance. Considering the same, it is to confirm that proposed location of /s Agrocel Industries is away from CRZ area by 23.5 km so CRZ Clearance is not required under the CRZ notification 2011.

The committee was satisfied with the response provided by PP on above information. Further, Committee desired to submit the above information in writing. Accordingly, PP has submitted the desired information and EAC found the information/commitments satisfactory.

The EAC deliberated the Onsite and Offsite Emergency plans and also the various mitigation measures proposed during the implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, as amended from time to time.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for the grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate-legislations, etc., as may be applicable to the project. The PP shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

27. 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) 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

(ii) ESP followed by wet scrubber along with stack height of 47 m, 51 m, 51 m, 51 m and 51 m shall be provided to additional Coal fired Boiler (30 TPH; 45 TPH; 45 TPH; 45 TPH and 45 TPH) to control particulate emissions as per CPCB /SPCB norms. Multicyclone separator followed by bagfilter along with stack height of 24 m, 24 m, 30m, 30m, 30m and 30m shall be provided to coal fired Hot Air Generator (5 lakh Kcal /hr., 4 lakh Kcal /hr., 50 lakh Kcal /hr., 50 lakh Kcal /hr., 50 lakh Kcal /hr. and 50 lakh Kcal /hr.,) to control particulate emissions as per CPCB /SPCB norms. Stack height of 30m shall be provided to DG set (3x500 KVA) as per CPCB/SPCB norms.

(iii) Water and Alkali Scrubber along with adequate stack height shall be provided to control process emissions viz. Br_2, Cl_2, and HBr generated from the existing and proposed Bromine plant. Two Stage Alkali Scrubber along with adequate stack height shall be provided to control process emissions viz., Br_2, Cl_2, and HBr generated from the proposed Bromine Stripping plants. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.

(iv) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.

(v) Total fresh water requirement from pond filled during high tide shall not exceed 22378 m^3/day.

(vi) NOC from the Concerned Authority shall be obtained before start of the construction of plant for drawing of the water from pond filled during high tide 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.

(vii) Total industrial effluent generation shall not exceed 456994 KLD, Wastewater from process effluent 453712 KLD (Process Brine W/w 435559 + others 18153 KLD), Scrubber (80.0 KLD), stripper washing (1402 KLD), cooling bleed off (150 KLD), boiler blow down (1328 KLD), RO Reject (2380 KLD), Water with Lime slurry (1800 KLD) shall be treated in the ETP (Neutralization and Settler). Effluent from ETP will be sent to evaporation pan for recovery of mineral salt, which is one of the raw materials of products. Domestic wastewater/sewage shall be treated in STP and treated sewage will be reused for horticulture purpose. Industrial unit shall maintain ZLD.

(viii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix) The green belt of at least 5 m-10m width shall be developed in an area of 27% i.e. 99812 m^2 within factory premises and 7% i.e. 25665 m^2 in surrounding and approach road of project site. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. 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.

(x) 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.

(xi) Roof top rain water shall be collected in 5 x 200 KL underground RCC storage tank. The rain water collected shall be reused within the plant after filtration as per requirement. Storm water from the open area shall be collected separately and stored in an underground RCC storage tank, which has shall be recycled/reused within the plant premises.

(xii) 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 by engaging 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. The 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 the previous year.

(xiii) 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 Rs. 901.2 Lakhs (Capital cost) and Rs. 109.5 Lakhs per annum (Recurring cost)] shall be kept in a 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 the previous year.

(xiv) Plantation of saplings shall be carried out as a part of tree plantation campaign "EK PED MAA ke NAAM" and details of the same to be uploaded in the Meri LiFE 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) All the hazardous waste shall be managed and disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Hazardous waste such as Distillation Residue and Off Specification Products shall be either sent to common incineration site or send for coprocessing. Solid waste shall be segregated into dry and wet garbage at site in accordance to the Solid Waste Management Rules, 2016. Wet garbage shall be converted into compost and used as manure for greenbelt development. Fly ash shall be stored in silos and used for filling low lying area after prior approval of SPCB or sent for brick manufacturer or co-processing in cement industries.

(xvi) The PP 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.

(xvii) The project proponent shall comply with the environment norms for 'Fertilizer Industry' as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 1607 (E), dated 29th December, 2017 under the provisions of the Environment (Protection) Rules, 1986.

(xviii) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP 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.

(xix) 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.

(xx) 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.

(xxi) The occupational health centre for surveillance of the worker's health shall be set up. 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.

(xxii) 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.

(xxiii) The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xxiv) 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.

(xxv) 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.

(xxvi) 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.

(xxvii) 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. Chemicals 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. All Internal roads shall be paved. The Air Pollution Control System shall be interlocked with process plant/machinery for shutdown in case of operational failure of Air Pollution Control Equipment.

(xxviii) 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.

(xxix) 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.

ANNEXURE-I

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.

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Annexure-II

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.	Dr. P. Jagannadha Rao	Member
7.	Dr. Vijay S Moholkar	Member
8.	Shri A N Singh	Member Secretary
MoEFCC		
1.	Dr. Kanchan Puri	Scientist-B
2.	Dr. Bhawana Kapkoti Negi	Technical Officer

List of the Expert Appraisal Committee (Industry-3) members participated in Day - II 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.	Dr. P. Jagannadha Rao	Member
7.	Dr. Vijay S Moholkar	Member
8.	Shri A N Singh	Member Secretary
MoEFCC		
1.	Dr. Kanchan Puri	Scientist-B
2.	Dr. Bhawana Kapkoti Negi	Technical Officer

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MoM approved by

(Prof. Aniruddha B. Pandit)
Chairman