

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

Dated: 08.01.2021

MINUTES OF THE 3rd EXPERT APPRAISAL COMMITTEE (INDUSTRY-3)
MEETING HELD DURING 29-30 DECEMBER 2020

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

DAY 1: 29th December, 2020 (Tuesday)

(i) Opening Remarks by the Chairman

The Chairman made hearty welcome to the Committee members and opened the EAC meeting for further deliberations.

(ii) Confirmation of the Minutes of the 2nd Meeting of the EAC (Industry-3) held during December 8-9 December, 2020 at MoEFCC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-3) members on the minutes of its **2nd Meeting of the EAC (Industry-3) held during December 8-9, 2020** conducted through Video Conferencing (VC), and as such no request has been received for any modifications in the minutes of the project/activities, **confirmed the same.**

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:-

Consideration of Environmental Clearance

Agenda No. 3.1

Expansion of Active Pharmaceutical Ingredients (API's) Manufacturing Unit by M/s Varahi Pharma Private Limited located at Plot Nos. 233 to 238, APIIC Growth Centre, Village- Thumukunta, Mandal- Hindupur, District- Ananthapur, Andhra Pradesh - Consideration of Environment Clearance.

[IA/AP/IND2/175972/2020, IA-J-11011/320/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Rightsource Industrial Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Active Pharmaceutical Ingredients (API's) Manufacturing Unit of capacity 75.5 TPM by M/s Varahi Pharma Private Limited located at Plot Nos. 233 to 238, APIIC Growth Centre, Village- Thumukunta, Mandal- Hindupur, District- Ananthapur, Andhra Pradesh.

The details of products and capacity are as under:

S. No	Product Name	Quantity (TPM)	CAS No	Therapeutic category
1	Apixaban	1.50	503612-47-3	Anti- coagulant
2	Brinzolamide	2.00	138890-62-7	Anti-glaucoma
3	Clopidogrel bisulphate	8.00	113665-84-2	Antihypertensive
4	Dabigatran Etextilate Mesylate	3.00	211915-06-9	Anti-coagulant
5	Donepezil hydrochloride	3.00	120011-70-3	Anti-Alzheimer's
6	Duloxetine hydrochloride	2.00	116539-59-4	Anti-Depressant
7	Gabapentene	5.00	60142-96-3	Anticonvulsant
8	Lacosamide	3.00	175481-36-4	Used for treatment of partial-onset seizures and diabetic neuropathic pain
9	Levetiracetum	8.00	102767-28-2	Used to treat epilepsy
10	Linagliptin	3.00	668270-12-0	Used to treat diabetes mellitus type 2
11	Losartan potassium	5.00	114798-26-4	Antihypertensive

12	Loxoprofen sodium hydrate	3.00	80382-23-6	Pain reliever
13	Olmisartan	5.00	144689-63-4	Anti-hypertensive
14	Risperidone	2.00	106266-16-2	Antipsychotic
15	Rivaroxaban	2.00	366789-02-8	Anti- coagulant
16	Sitagliptin phosphate monohydrate	5.00	654671-77-9	Used to treat type 2 diabetes
17	Telmisartan	2.00	144701-48-4	Anti-hypertensive
18	Teneligliptin penta hydrobromide hydrate	2.00	760937-92-6	Used in treatment of type 2 diabetes mellitus
19	Valsartan	5.00	137862-53-4	Antihypertensive
20	Vildagliptin	6.00	274901-16-5	Anti-diabetic
	Total	75.5		

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the product	Name of the By-product	Quantity in Kg/day
1	Apixaban	Potassium chloride	21.30
		Potassium bromide	34.05
		Phosphorous trichloride	34.30
2	Brinzolamide	p-Toluene sulfonic acid	35.60
3	Clopidogrel Bisulfate	Triethyl amine Hydrochloride	137.50
		P-Toluene sulfonic acid	148.00
4	Donepezil Hydrochloride	Potassium chloride	43.00
		Methoxy Ethanol	73.60
		Aluminium hydroxide	37.74
		Dimethyl Sulfide	25.22
5	Duloxetine Hydrochloride	Oxalic acid	21.40
6	Losartan Potassium	Succinimide	60.30
		Trityl alcohol	133.10
		Sodium bromide	52.70
7	Rivaroxaban	Potassium chloride	24.60
		Triethyl amine Hydrochloride	39.87

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020). Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Public hearing is exempted since the proposed project falls under category B2. It was informed that no litigation is pending against the proposal.

M/s Varahi Pharma Pvt. Ltd. obtained Environmental Clearance from MoEF& CC for Bulk Drugs & Intermediates Manufacturing Unit vide EC letter no: J-11011/101/2010-IA-II (I), dated: 2nd September, 2011 for manufacture of 11 Nos. of products with a capacity of 10.70 MTPM. The MoEF& CC, Regional Office, Chennai has visited the industry on 02.09.2020 and Certified Compliance Report (CCR) was issued vide letter dated 22.09.2020. The EAC deliberated the compliance status and found report in order.

Existing land area is 2.20 acres (8942.40 sq. m). Industry will develop greenbelt in an additional area of 1534.40 Sqm out of 8942.40 Sqm of the total project area. The total green belt will be 2993.6 Sqm which is 33.48 % of total area.

The estimated project cost is Rs.4.80 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.155 Lakhs and the recurring cost (operation and maintenance) will be about Rs.28 Lakhs per annum. Total Employment will be 250 persons. Industry proposed to allocate Rs.4.80 Lakhs for 5 years towards Corporate Environment Responsibility.

There are no National parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Total water requirement is 154.97 m³/day of which fresh water requirement of 107.87 m³/day will be met from APIIC water supply. Generated effluent of 59.65 m³/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO. Plant will be based on Zero Liquid Discharge System.

Power requirement will be 1500 kVA and will be met from Andhra Pradesh State Southern Power Distribution Company Limited (APSPDCL). The unit is proposed to install 1 X 750 kVA DG Set, along with existing 1 X 250 kVA DG Set, Stack (height 10 mts & 7 mts) will be provided as per CPCB norms to the proposed DG sets. Boiler of 4 TPH is proposed along with existing 2 TPH boiler with stacks of height 30 metres each. Cyclone separators and bag filters will be installed separately for each of the boiler for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³).

Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity In Kg/Day	Treatment Method
1	Carbon dioxide	365.00	Dispersed into the atmosphere
2	Hydrogen	4.00	Diffused by using Nitrogen through Flame arrestor

3	Ammonia	32.00	Scrubbed by using chilled water media
4	Oxygen	48.00	Dispersed into the atmosphere
5	Nitrogen	24.00	Dispersed into the atmosphere
6	Hydrogen Bromide	122.00	Scrubbed by using C. S. Lye solution
7	Hydrogen chloride	271.00	Scrubbed by using chilled water media
8	Sulphur dioxide	220.00	Scrubbed by using C. S. Lye Solution
9	Hydrogen iodide	27.00	Scrubbed by using C. S. Lye Solution
10	Hydrogen fluoride	17.00	Scrubbed by using C. S. Lye Solution
11	Chloromethane	14.00	Scrubbed by using C. S. Lye Solution
12	Propane	15.00	Diffused into atmosphere through Flame arrestor

Details of Solid waste & Hazardous waste generation and its management:

S. No	Name of the Hazardous Waste	Quantity	Disposal Method
1	Organic solid waste	2657 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	98 Kg/Day	
3	Solvent Distillation Residue	645 Kg/Day	
4	Inorganic Solid Waste	886 Kg/Day	Will be sent to TSDF
5	ETP Sludge	80 Kg/Day	
6	MEE Salts	2348 Kg/Day	
7	Organic distillate from MEE Stripper	730 Kg/Day	Will be sent to Cement Industries
8	Used Oils	200 Ltrs/Annum	Will be sent SPCB Authorized Agencies for Reprocessing/ Recycling
9	Detoxified Containers	750 No's / Month	After Detoxification will be sent to SPCB Authorized Agencies.
10	Used Lead Acid Batteries	4 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
11	Ash from boilers	7350 Kg/Day	Will be sent to Brick Manufacturers

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR & EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the PFR & EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The Committee has also deliberated on the activities/ action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). As committed by the project proponent, 2000 – 5000 trees need to be planted in the nearby areas within the period of two years from grant of EC and the necessary implementation report must be submitted.

- (iii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.
- (iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Total fresh water requirement shall not exceed 107.87 m³/day, proposed to be met from APIIC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix). 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.
- (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 server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xi). 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 flame 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.
- (xii). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- (xvi). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.2

Manufacturing of Synthetic Organic Chemicals at Plot No.:502, GIDC Industrial Estate, Panoli Taluka: Ankleshwar Dist: Bharuch (Gujarat) by M/s Shubhlaxmi Pigments- Consideration of Environmental Clearance

[IA/GJ/IND2/166642/2019, IA-J-11011/321/2020-IA-II(I)]

The Project Proponent and their Consultant M/s Jyoti Om Chemical Research Centre Pvt Ltd, made a presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Manufacturing of Synthetic Organic Chemicals (Pigments) at Plot No. 502, GIDC Estate Panoli, Taluka Ankleshwar, District Bharuch, Gujarat by M/s Shubhlaxmi Pigments.

The proposal was considered by the State Expert Appraisal Committee, Gujarat, in its meeting held on 06/06/2019 and ToR has been issued by SEIAA, Gujarat, vide letter No. SEIAA/GUJ/TOR/F(f)/1061/2019 dated 17 July 2019.

The project/activities are covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to

applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent obtained environmental clearance for chemical manufacturing in the proposed site, but, reported that the operation has not been started. **The Committee was of the view that operational status of the existing unit/compliance status of the EC conditions shall be submitted through Regional Office of the Ministry for appraisal of the project as per the Standard TOR condition. The Committee has also showed its displeasure on the technical quality of the EIA/EMP report and incomplete application and asked the consultant to get the accreditation from the QCI/NABET for preparation of EIA/EMP report.**

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following requisite information/input, as under:

- (i) Project proponent shall revise the complete EIA/EMP Report providing all the requisite information as per the Appendix III of the EIA Notification, 2006.*
- (ii) Form -2 shall be revised with complete details of the project.*
- (iii) Consultant to provide copy of valid accreditation certificate from the QCI/NABET, for preparation of the EIA/EMP report.*
- (iv) Details of existing project, along with copy of CTE/CTO.*
- (v) Operation status of the existing unit/Compliance status of existing EC conditions forwarded by the Ministry's Regional Office needs to be submitted as per Ministry's OM of 2012 as well as Standard TOR granted to the project in 2019.*
- (vi) Detailed process flow diagram.*
- (vii) Complete details of baseline (AAQ/water etc.) data collected from the project site during March-May-2018 and for high concentration its mitigation measures must be provided since the site is located in CPA.*
- (viii) Action plan for controlling the fugitive emissions from the unit considering the unit proposed in the CPA.*

The proposal was accordingly **returned** in its present form for submission of revised Report as per provisions of the EIA Notification. 2006.

Agenda No. 3.3

Capacity Expansion and Addition of New Pesticide, Pesticide Specific Intermediates & Synthetic Organic Chemicals (Chemical Intermediates) by M/s UPL Limited Unit #04- Consideration of Environment Clearance

[IA/GJ/IND2/183253/2020, IA-J-11011/89/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Eco Chem Sales & Services made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion and Addition of Pesticide Technical, Pesticide Specific Intermediates and Synthetic Organic Chemicals (Chemical Intermediates) by M/s UPL Limited, Survey No 224,225,226 & 227, Village Gopipura, Taluka-Halol, District Panchmahal (Gujarat).

The ToR has been issued by Ministry vide letter dated 31st March 2020.

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

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent is operating the existing unit with CTE/CTO from the State PCB. PP vide letter dated 13.11.2020 requested SPCB for certified compliance status of CTO. **The Committee was of the view that, as per the ToR issued for the project in March 2020, certified compliance status of the existing CTO conditions shall be submitted through SPCB for appraisal of the project.** The Member Secretary has also informed the Committee that the Ministry may also request SPCB to provide compliance status of the CTO. In this regard, the Ministry, vide email dated 30.12.2020 has requested MS GPCB to provide the certified compliance report of the CTO conditions as per TOR granted to the project.

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following additional information/input, as under:

- (i) Certified compliance status of latest CTO conditions forwarded by the SPCB as per provision of the Standard TOR granted to the project.*
- (ii) Project proponent shall revise the EIA/EMP Report and Form -2 providing all the requisite information.*
- (iii) Details of existing products with consented and production capacity, along with copy of CTE/CTOs.*

- (iv) *Complete details of baseline (AAQ/water etc) data collected from the project site during March-May-2018.*
- (v) *Public hearing issues, action plan/activities with timelines based on public hearing and socio-economic status of the study area.*

After detailed deliberation by the EAC, the proposal was accordingly **returned** in its present form for submission of revised Report as per provisions of the EIA Notification 2006. EAC is of the view that once PP submit all details of the proposal along with compliance report, the same may be placed before the next EAC for its appraisal.

Agenda No. 3.4

Expansion of Synthetic Organic Chemicals at Existing unit at Plot No. 6213 & 6213/1, Notified GIDC Industrial Estate, Ankleshwar, District - Bharuch, State – Gujarat by M/s Avdhoot Pigments Pvt Ltd- Consideration of Environment Clearance

[IA/GJ/IND2/168093/1986, IA-J-11011/321/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Siddhi Green Excellence Pvt Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion Synthetic Organic Chemicals manufacturing unit at Plot no. 6213 & 6213/1, Notified GIDC Industrial Estate, Ankleshwar, District Bharuch, Gujarat, India by M/s Avdhoot Pigments Pvt Ltd

The ToR has been issued by State Level Environment Impact Assessment Authority (SEIAA) vide letter no. SEIAA/GUJ/5(f)/978/2019 dated 25th June, 2019.

The project/activities are covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent obtained environmental clearance for chemical manufacturing in the proposed site, but, reported that the operation has not been started due to hydraulic load constraints in the region. **The Committee was of the view that operational status of the existing unit/compliance status of the EC conditions shall be submitted through Regional Office of the Ministry for appraisal of the project as per the Standard TOR condition.** The

Committee has also showed its displeasure on incomplete application and asked the consultant to revise the EIA/EMP report accordingly.

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following additional information/input, as under:

- (i) Operation status of the existing unit/Compliance status of existing EC conditions forwarded by the Ministry's Regional Office needs to be submitted as per Ministry's OM of 2012 as well as Standard TOR granted to the project in 2019.*
- (ii) Project proponent shall revise the EIA/EMP Report and Form 2 providing all the requisite information.*
- (iii) Details of existing project, along with copy of CTE/CTO.*
- (iv) Detailed process flow diagram.*
- (v) Considering that the baseline data is of February-April, 2017, additional one month (recent) AAQ baseline data to be collected to validate the existing data.*
- (vi) Action plan for controlling the fugitive emissions from the unit considering the unit proposed in the CPA.*

The proposal was accordingly **returned** in its present form for submission of revised Report as per provisions of the Appendix III of the EIA Notification, 2006.

Agenda No. 3.5

Manufacturing unit of Dyes and Dyes Intermediates at Plot No. 12,13, Umiya Industrial Estate, Torrent–Indrad Road, Indrad, Tal-Kadi, Dist-Mehsana, Gujarat by M/s Vibgyor Chemtex Industries- Consideration of Environment Clearance

[IA/GJ/IND2/120438/2019, IA-J-11011/298/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Green Circle Inc, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Manufacturing of Synthetic Organic Resin of capacity 279 TPM at Plot No. 12, 13, Umiya Industrial Estate, Torrent–Indrad Road, Indrad, Taluka Kadi, District Mehsana, Gujarat by M/s Vibgyor Chemtex Industries.

The details of products and capacity as under:

S. No	Name of Product	CAS No	Capacity (TPM)
1.	Disperse Red F3BS	99031-78-6	20
2.	Disperse Blue GSL	41642-51-7	10

3.	Disperse Yellow SG	12236-36-1	6
4.	Disperse Yellow 4G	86836-02-4	6
5.	Disperse Yellow SGL	61968-66-9	6
6.	Butyl Pyridone	39108-47-9	6
7.	Ethyl Pyridone	29097-12-9	6
8.	Methyl Pyridone	1003-56-1	6
9.	N,N-Diethyl Meta Amino Sulphonic Acid	134-62-3	10
10.	2,6 DibromoParaToludine	6968-24-7	15
11.	2,6 Dibromo Para Nitro Aniline	827-94-1	10
12.	Zinc Cyanide	557-21-1	5
13.	Copper Cyanide	544-92-3	5
14.	Intermediate of Disp Red 343	99035-78-6	15
15.	Intermediate of Blue 165	41642-51-7	14
16.	N,N-Diethyl Meta Amino Acetanilide	6375-46-8	7
17.	2,4 DNA	97-02-9	15
18.	6 bromo 2,4 Di Nitro Aniline	2316-50-9	20
19.	Sulpho methyl carbamoyl pyridone	40306-70-5	10
20.	Disperse Yellow 10GN/Yellow 184:1	164578-37-4	2
21.	4 CHLORO 2 AMINO PHENOL	95-85-2	10
22.	Sodium Acetate	127-09-3	20
23.	Dispersing Agent Nks	-	20.00
24.	Dispersing Agent 045(50%)	-	20.00
25.	Sulphanilic Acid	121-57-3	5.00
26.	Fast Bordesux GP Base	96-96-8	10
	Total		279

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

The Standard ToR has been issued by Ministry vide letter dated 14.11.2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 12.10.2020, which was presided over by the Prant Officer and SDM. The main issues raised during the public hearing are related to employment, greenbelt, Waste Water Management and development of surrounding Villages. It was informed to the Committee that the District Collector has authorized SDM to act as ADM for conducting the public hearing. The Committee deliberated the issue. It was also informed by the project proponent that there is no litigation pending against the proposal.

The land area available for the project is 5040 sqm. Industry will develop greenbelt in an area of 33 % i.e., 1704 m² area out of total area of the project. The estimated project cost is Rs 1.6 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs 32.3 Lakh and the recurring cost (operation and maintenance) will be about Rs 78.6 Lakh per annum. Total Employment will be 12 persons as direct. Industry proposes to allocate Rs 3.2 Lakh towards Corporate Environmental Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during March-18 to May-18 and the baseline data indicates the ranges of concentrations as: PM10 (50.37 - 75.71µg/m³), PM2.5 (22.16- 43.75µg/m³), SO₂ (8.27 - 14.74 µg/m³) and NO₂ (13.46 - 26.16µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.8613 µg/m³, 0.2331 µg/m³ and 0.4958 µg/m³ with respect to PM10, Sox and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS

Total water requirement is 30.37 m³/day of which fresh water requirement of 20.37 m³/day will be met through Common Borwell of Estate. Effluent of 24.37 KLD quantity will be treated through ETP. Treated industrial waste water of 7.04 KLD will be sent to common Spray Dyer for evaporation located within the Industrial area.

Power requirement will be 500 HP and will be met from Uttar Gujarat Vij Company Limited (MGVCL). Unit will have 1 DG sets of 125 kVA capacity, which will be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets.

Unit will have Steam Boiler (cap.400 Kg/Hr) and Thermic Fluid Heater (10 Lac Kcal) using Bio Coal/ N.G as a fuel. Dust Collection and Cyclone Separator system with Stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers.

Details of Process emissions generation and its management.

S. No.	Source of emission	Stack Height (Meter)	Air Pollution Control Measures	Air Pollutants	Permissible Limit
1	Process Reactors	12	Two Stage Water scrubber followed by alkali Scrubber	SO ₂ HCL	<40 mg/NM ³ ,20 mg/NM ³

2	Process Reactors	12	Two Stage Water scrubber followed by alkali Scrubber	Ammonia	<175 mg/NM3
3	Process Reactor	12	Two State alkali Scrubber	HBr Br	<20 mg/NM3 <9 mg/NM3
4	Solvent Recovery System	-	Packed Carbon Column followed	VOC	BDL
5	Material Handling Unit	11	Water Scrubber followed by Dust Collector	PM	< 50 mg/ NM3

Details of Solid waste/ Hazardous waste generation and its management is as under:

S. No.	Type of Waste	Source	Catg. As per Sch.-1	Quantity MT/Annum	Mode of Disposal
1	ETP Sludge	Treatment Plant	34.3	300 T/Annum	Collection, Storage transportation and disposal at TSDF site/ Co processing at Cement Industry
2	Empty Bags & liners	Raw Material	33.3	50 T/Annum	Collection, Storage transportation and reuse in plant or selling to registered vendors and partially reuse in plant
3	Used Oil	Plant Machinery	5.1	0.50	Collection, Storage, Transportation & Reuse as lubricant in plant
4	Iron Sludge	Process (source in above table)	26.10	360 T/Annum	Collection, Storage, Transportation & disposal at TSDF/Co processing at Cement Industry
5	Process Waste	Process (source in above table)	26.10	72 T/Annum	Collection, Storage, Transportation & disposal at TSDF
6	Scrubber Bleed off	Air Pollution Control Measures	-	30 T/Annum	Collection, Storage, Transportation & treat with Waste water and evaporated.

Deliberations in the EAC:

The Member Secretary informed the EAC that Public Hearing has to be presided by the District Magistrate not below the rank of Additional District Magistrate as per provisions of the EIA Notification, 2006.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area and public hearing issues. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has suggested the PP to initiate greenbelt development for abatement of pollution.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Treated effluent of 7.04 cum/day proposed to be discharged to Common Spray Dryer shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (iv). 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.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). 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 flame 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.
- (ix). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (x). Total fresh water requirement shall not exceed 20.37 cum/day proposed to be met from common borewell in the Industrial estate. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA, and renewed from time to time. If the Industrial estate fails to obtain CGWA permission for ground water extraction, the unit shall obtain CGWA permission before commissioning of the plant. No activities shall be initiated without taking proper permission for ground water extraction.
- (xi). 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.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). The activities and the action plan proposed by the project proponent to address the public hearing issues and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.
- (xv). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.6

Setting up of Active Pharmaceutical Ingredient (API's), Bulk Drugs manufacturing facility by M/s Aarti Industries Limited located at Plot no E-59-1, MIDC Tarapur, Maharashtra - Consideration of Environment Clearance [IA/MH/IND2/188082/2020, IA-J-11011/324/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Aditya Environmental Services Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project Setting up Active Pharmaceutical Ingredient (API) manufacturing facility of capacity 210 TPM by M/s Aarti Industries Limited located at Plot no E-59-1, MIDC Tarapur, Maharashtra.

The details of products and capacity are as under:

Existing Products

S. No.	Product*	Quantity as per Consent
1	Injection (API formulation activity with Chemical storage & Packing activity)	6000000 Nos./Month
2	Ofloxacin (Size reduction by grinding, packing & dispatch activity)	300 MT/Month

* Formulation, storage, packing & dispatch activity

Proposed Products

S. No.	Quantity in Group (TPM)	Product	Quantity (TPM)	CAS no.
1.	2	Ramipril	2	87333-19-5
2.	25	Ranolazine	25	95635-56-6
3.	2	Formoterol Fumarate Dihydrate	2	183814-30-4
4.	35	Venlafaxine Hydrochloride	35	99300-78-4
5.	2	Olopatadine Hydrochloride	2	140462-76-6
6.	10	Phenylephrine Hydrochloride	10	61-76-7
7.	2	Loteprednol Etabonate	2	82034-46-6
8.	2	Capecitabine	2	154361-50-9
9.	5	Tofacitinib	5	540737-29-9
10.	5	Cinacalcet hydrochloride	5	364782-34-3
11.	5	Montelukast Sodium	5	151767-02-1

12.	10	Apixaban	2.5	480449-71-6
		Betrixaban	2.5	936539-80-9
		Rivaroxaban	2.5	366789-02-8
		Edoxaban Tosylate, Edoxaban Tosylate mono- hydrate	2.5	480449-71-6; 1229194-11-9
13.	20	Quetiapine Fumarate	20	111974-72-2
14.	25	Aminophylline	25	317-34-0
15.	10	Umeclidinium	5	869185-19-3
		Vilanterol	5	503070-58-4
16.	20	Ifosfamide	1.5	3778-73-2
		Cyclophosphamide	1.5	6055-19-2; 50- 18-0
		Mercaptopurine	1.5	50-44-2
		Abemaciclib	1.5	1231929-97-; 1231930-82-7
		Acalabrutinib	1.5	1420477-60-6
		Apalutamide	2	956104-40-8
		Ibrutinib	1.5	936563-96-1
		Nilotinib Hydrochloride anhydrous, Nilotinib Hydrochloride monohydrate	1.5	641571-10-0; 923288-90-8
		Niraparib Hydrochloride	1.5	1038915-60-4; 1038915-64-8
		Nintedanib Esylate	1.5	656247-18-6
		Palbociclib	1.5	359886-84-3
		Ribociclib	1.5	1211441-98-3 1374639-75-4
		Venetoclax	1.5	1257044-40-8
17.	15	Dapagliflozin	5	461432-26-8; 960404-48-2
		Canagliflozin Hemihydrate	5	842133-18-0
		Empagliflozin	5	864070-44-0
18.	10	Deferiprone	5	30652-11-0
		Deferasirox	5	201530-41-8
19.	5	Sitagliptin HCl, Phosphate & monohydrate	5	486459-71-6
	210	--	210	--

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 (amendment on 27.03.2020). Due to applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry. Public hearing is exempted since the proposed project falls under category B2 and the site is located in industrial area. It was informed that no litigation is pending against the proposal.

Existing land area is 15,088 sq. m. Industry will develop Green belt in an area of 6816.36 sq. m (45.17%) out of total area of the project. Out of 6816.36 sq. m of green belt, 3209.82 sq. m will be developed within plot & 3606.54 sq. m will be developed on outside plot adjacent to the plot area.

The estimated proposed project cost is Rs.45 Crores. Total capital cost earmarked towards environmental pollution measures is Rs.5.44 Crores & the Recurring cost (operation & maintenance) will be about Rs.2.07 Crores per annum. Total employment will be 280 persons as direct & 1400 persons indirect for proposed project. Industry proposes to allocate Rs.90 Lakhs towards Corporate Environment Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Nalla outside plot passes along east to southwest plot boundary. Banganga River is flowing at a distance of 1.8 km in North-West direction.

Total water requirement is 510 m³/day out of which fresh water requirement of 366 m³/day will be met from MIDC and balance 144 m³/day will be met from recycling treated effluent. Trade Effluent of 142 m³/day will be treated through ETP, RO, MEE & ATFD. Treated effluent will be fully recycled back within facility. No effluent will be discharged outside facility. Proposed project is Zero Liquid Discharge facility. Domestic sewage of 12 m³/day will be treated in STP. Treated sewage will be used for green belt maintenance within site.

Power requirement for proposed project will be 5500 kVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). 1 no. of 625 kVA & 1 no. of 1250 kVA DG sets will be used as standby during power failure. Stack height (7 m each above building) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 2 TPH Furnace oil fired boiler as per Consent to Establish. For proposed project, 1 no. of 14 TPH Biofuel (Biodiesel)/ Natural Gas fired boiler & 1 no. of 14 TPH Coal/ Briquette fired boiler will be installed. Existing Boiler as per CTE will not be installed on site as capacity of higher boilers are proposed. Lime treatment with Cyclone separator followed by bag filter will be installed for controlling the Particulate emissions within limit of 150 mg/Nm³. Common stack height of 40 m will be provided for proposed boilers.

Details of Process emissions generation and its management.

Details	Scrubber- 1	Scrubber- 2	Scrubber- 3	Scrubber- 4
Scrubbing Media	Caustic	Caustic	Acid	Acid
Packing Type	PP Pall Rings	PP Pall Rings	PP Pall Rings	PP Pall Rings
MOC	PP FRP	PP FRP	PP FRP	PP FRP
Shape	Cylindrical	Cylindrical	Cylindrical	Cylindrical
Diameter	500 mm	500 mm	500 mm	500 mm
Pollutant	Acid mist	Acid mist	Alkali mist	Alkali mist
Stack height	6 m	6 m	6 m	6 m
Gas Temperature	Ambient	Ambient	Ambient	Ambient
Control Equipment	Temperature Transmitter/ Pressure transmitter/ pH sensor	Temperature Transmitter/ Pressure transmitter/ pH sensor	Temperature Transmitter/ Pressure transmitter/ pH sensor	Temperature Transmitter/ Pressure transmitter/ pH sensor

Details of Solid waste & Hazardous waste generation and its management:

Solid waste generation & it's disposal:

Particulars	Total Quantity	UOM	Method of Disposal
Used Apron	1600	No/month	Sell to scrap merchant/ Authorized party
Hand gloves	3200	No/month	Sell to scrap merchant/ Authorized party
Paper/Files	150	Kg/month	Sell to scrap merchant/ Authorized party
Metal scrap	150	MT/A	Sell to scrap merchant/ Authorized party
Glass scrap	3600	Kg/A	Sell to scrap merchant/ Authorized party
Corrugated box	4500	No/A	Sell to scrap merchant/ Authorized party
Garbage	4500	Kg/A	Sell to scrap merchant/ Authorized party

Particulars	Total Quantity	UOM	Method of Disposal
Fibre drums	2200	No/Month	Sell to scrap merchant/ Authorized party
MS drums	1000	No/Month	Sell to scrap merchant/ Authorized party
Wood pallets & packing material	2500	Kg/A	Sell to scrap merchant/ Authorized party
Coal ash	90	MT/Month	Sell to Authorized party/ brick manufacturer
E waste	500	Kg/ Month	Sell to Authorized party

Hazardous waste generation & it's disposal:

S. No.	Hazardous Waste	Category	Existing Qty.	Proposed add. Qty.	Total Qty.	UOM	Disposal
1	Used oil	5.1	41	759	800	L/month	Sale to Authorized party
2	Spent Acid	26.3	--	150	150	Tons/M	Sale to Authorized party
3	Process residue & Waste	28.1	--	35	35	Tons/M	CHWTSDF
4	Spent catalyst	28.2	--	1	1	Tons/M	send for activation
5	Spent Carbon	28.3	--	30	30	Tons/M	CHWTSDF/Sent to coprocessor industries
6	Off specification products	28.4	--	1000	1000	Kg/A	CHWTSDF
7	Date Expired Material	28.5	--	1000	1000	Kg/A	CHWTSDF
8	Spent solvent	28.6	56	725	781	KL/M	Authorized reprocessor/ CHWTSDF
9	Empty barrels/ containers/ Plastic bags & fibres	33.1	500	7200	7700	Nos/M	Authorized recycler
10	Sludge from ETP	35.3	0.5	6	6.5	Tons/M	CHWTSDF

S. No.	Hazardous Waste	Category	Existing Qty.	Proposed add. Qty.	Total Qty.	UOM	Disposal
11	Oil & Grease Skimming	35.4	--	100	100	Kg/A	CHWTSDF
12	Concentration residue /MEE salts	37.3	0.5	120	120.5	Tons/M	CHWTSDF

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR & EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The Committee has appreciated the quality of the presentation and technical knowledge of the consultant, and recommended to rate at excellent level.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the PFR & EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The committee found that only 20% land is available for the green belt development. As informed by the PP additional green belt development will be done in nearby area. The committee convinced that EC can be granted only if additional land will be approved by the MIDC for green belt development by PP. The Committee has also deliberated on the activities/ action plan and found to be addressing the issues in the study area. The Committee has also deliberated the activities/action plan and it's mitigation plan with respect to critically polluted area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (i). The SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (ii). 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.
- (iii). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.
- (iv). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Total fresh water requirement shall not exceed 366 m³/day will be met from MIDC. Prior permission in this regard shall be obtained from the concerned regulatory authority.

- (ix). 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.
- (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 server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xi). 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 flame 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.
- (xii). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- (xvi). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.7

Modernization & Expansion of existing Fertilizer Plant, Kalol Unit Gandhinagar (Gujarat) by M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO)-Consideration of Environmental Clearance

[IA/GJ/IND2/185904/2009, J-11011/60/2009-IA II (I)]

The Project Proponent and the accredited Consultant M/s EQMS India Pvt Ltd. made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion/Modernization of the Fertilizer Plant at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanaj, Kasturinagar, Kalol, District Gandhinagar, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO).

Industry proposes to enhance the production of Urea from 6,02,250 MTPA to 6,75,000 MTPA, while the production of Ammonia plant will remain the same i.e., 4,01,500 MTPA. The unit also proposes to install Commercial-scale Nano Fertiliser Project having capacity of Nano-Nitrogen/Nano-Zinc/Nano-Copper of 27375 kL/year along with bottle manufacturing and bottling unit besides auxiliary facilities. The proposal has been bifurcated in two stages. Phase I - Enhance Urea production with Supply of Rich gas and installation of Commercial-scale Nano Fertiliser Project” and Phase II - Enhance Urea production with Supply of lean gas with installation of Carbon dioxide Recovery Unit (CDR). The phase II will be implemented only when there will be supply of lean gas. In phase II, 200 MTPD of CO₂ shall be recovered from the flue gas through CDR for production of Urea.

The details of products and capacity as under:

S. No.	Product	Unit	Quantity		
			Existing	Additional/ Proposed	After Modernization & Expansion
1.	Ammonia	MTPA	4,01,500	0	4,01,500
2.	Urea (100%) (Fertilizer Grade/Technical Grade)	MTPA	6,02,250 max or	72,750	6,75,000 max or
3.	Urea (100%) or & Diesel Exhaust	MTPA	5,44,500 & 1,77,690 i.e., (Equivalent to	- & 2,23,848	5,44,500 & 4,01,538 i.e., (Equivalent to 1,30,500

	Fluid (32% of Urea Solution)		57,750 of 100% Urea) max or	(32.5% Urea solution) i.e., (72,750 of 100% Urea) or	of 100% Urea) max or #
4.	Urea (100%) or & Diesel Exhaust Fluid (40% of Urea Solution)	MTPA	5,44,500 & 1,44,375 i.e., (Equivalent to 57,750 of 100% Urea) max	- & 1,81,875 (40% Urea solution) i.e., (72,750 of 100% Urea)	5,44,500 & 3,26,250 i.e., (Equivalent to 1,30,500 of 100% Urea) max #
5.	Nano Fertilisers (Nano-Nitrogen/ Nano Zinc/Nano Copper*)	kL/year	0	27375	27375

Note:

Depending upon the requirement of urea fertilizer in the market, there shall be variation in quantity of DEF (32.5% and/or 40% urea Solution) production. The total urea production shall, however, be limited to 6,75,000 MTPA (Maximum) under all the above combinations.

*** Phase I include supply of Rich gas and new manufacturing unit of Nano Fertilizer products & Phase II include installation of CDR during supply of lean gas.*

Nano Nitrogen contains 40000 ppm (Min) of nitrogen, Nano Zinc contains 10000 ppm (Min) of Zinc and Nano copper contains 8000 ppm (Min) of copper.

The project/activities are covered under category A of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard Terms of Reference (TOR) was issued by MoEF&CC vide letter dated 06.11.2020. Public Hearing is exempted as the project is located within notified Industrial Area. It was informed that there is no litigation pending against the proposal.

The project proponent established plant in the year of 1975 to produce Ammonia and Urea. In 2009, Environment clearance was granted vide letter no. J-11011/60/2009-IA. II (I) dated 24.12.2009 by MoEF (I.A. division) under 5(a) for expansion of Kalol Fertilizer unit. The proposal was submitted as Brownfield Ammonia & Urea Project for 2400 MTPD Ammonia & 4200 MTPD Urea. Captive power plant of capacity 2x25 MW was also proposed. This expansion was proposed to be carry out on 18 Ha vacant lands available within the plant area. But the expansion work was not initiated because Department of Fertilizer, GOI vide letter no.

12012/10/2013-FPP dated 9th May 2013 advised that the project work should proceed ahead only after approval of Department of Fertilizer. However, single walled Ammonia Storage Tank was replaced with new Ammonia storage tank of double wall double integrity type considering safety aspects and as per one of the conditions of said Environmental Clearance. IFFCO has valid Amended Consolidated Consent and Authorization (CC&A) from GPCB vide order no GPCB/CCA/-GNR-95(8)/ID-16444/525223 dated 22.10.2019 for production of 4,01,500 MTPA of Ammonia, 6,02,250 MTPA of Urea (100%) Max or, 5,44,500 MTPA Urea & 1,77,690 MTPA of DEF (32.5% of urea solution) Max or, 5,44,500 MTPA Urea & 1,44,375 MTPA of DEF (40% of urea solution) Max for the existing project.

As per certified compliance report issued by RO, MoEFCC, out of total 36 conditions, 2 are complied, 4 are partly complied and 30 are considered as project not implemented. The Committee deliberated the status.

Existing land area is 95.5158 Ha and expansion is proposed within the existing land area. Industry has already developed greenbelt in an area of 45.71 Ha which will increase to 46.1756 Ha i.e., 48.34% after expansion. The estimated project cost for expansion is Rs. 166.8 Crores. Industry has already spent Rs. 4341.8 Lacs towards environmental pollution control measures. The capital cost earmarked towards environmental pollution control measures in expansion is Rs. 100 Lacs and recurring cost (Operation and maintenance) for existing and proposed project will be about Rs. 1500 Lacs per annum. Total Employment will be 1393 persons as direct & indirect after expansion. Industry proposed to allocate Rs. 52 Lacs towards Corporate Environmental Responsibility.

There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife sanctuary within 10 km distance from the project site. Sabarmati River is flowing at 12.8 km (ESE) from the project site, and Narmada Canal is flowing at 2.8 km (S) is flowing within 10 km of the project site.

Ambient air quality monitoring was carried out at 8 locations during 1st October to 31st December, 2019 and the baseline data indicates the ranges of mean concentrations as: PM₁₀ (45-91 µg/m³), PM_{2.5} (24-50 µg/m³), SO₂ (6.2-16.3 µg/m³) and NO₂ (11.9-27.3 µg/m³) NH₃ (16-36 µg/m³). AAQ modeling study for point & line source emissions indicates that the maximum incremental GLCs after the proposed project would be 8.51 µg/m³, 7.82 µg/m³, 1.43 µg/m³, 4.29 µg/m³ and 0.003 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂, NO_x & NH₃. All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

After expansion, the water requirement in Phase I including nano fertilizer plant will be 9947 KLD and in Phase II with CDR and nano fertilizer plant will be 10371 KLD. Water will be available from existing infrastructure of Narmada Canal water supply system to IFFCO Kalol Unit.

Effluent of 1423 KLD in Phase I and 1483 KLD in Phase II from Ammonia and Urea plant will be treated in the ETP and 1 KLD of Industrial effluent and 9 KLD of Domestic effluent from proposed Nano plant will be treated in Effluent Treatment System (ETS) cum neutralization tank and STP respectively. The treated water will be reused in Horticulture and plant will be based on Zero Liquid discharge system.

Power requirement after expansion in Phase I and Phase II will be 186 MW/day and 211 MW/day respectively and same will be met from UGVCL power supply. Existing unit has two no. of DG Sets of Capacity 2200 kW & 860 kW as standby during power failure. Stack Height of 24 m for 2200 KW & 22 m for 860 KW is provided as per CPCB norms. Existing unit has Natural gas based 80 TPH steam boiler. No additional Boiler is proposed. 35 m stack height has been provided for controlling the particulate emission within the statutory limit of 150 mg/Nm³.

Details of Process emissions generation and its management is mentioned below:

Table : Details of Process Emissions and their management

S. No.	Stack Attached	Fuel Used	APCM	Expected Pollutants	Emission as per latest Testing	Norms as per CTO	Norms as per MoEFCC
Process Stacks / Vents							
1	Prilling Tower – 4 Nos.##	-	Stack Height 68.5 m with Induced Draft, Vibropriller.	PM	PM- 86.3, 85.0, 87.2, 85.6 mg/Nm ³	PM- 150 mg/Nm ³	PM- 150 mg/Nm ³
2	Ammonia Scrubber	-	Venturi Water scrubber & 71 m stack Height	NH ₃	NH ₃ - < 10 mg/Nm ³	NH ₃ - 175 mg/Nm ³	-
3	Ammonia Plant Primary Reformer	-	Stack Height of 40 m	PM, SO ₂ &NO _x	PM- 7.3 mg/Nm ³ NO _x - 24 ppm SO ₂ - 11 ppm	PM- 150 mg/Nm ³ NO _x - 50 ppm SO ₂ - 100 ppm	NO ₂ – 195 ppm
<i>Note:</i>							

Additionally, Two Waste Heat Recovery System Generator are installed in the plant having capacity of 230 TPH and 40 TPH to generate steam through Ammonia plant process gas. No emissions are generated from these boilers.

Four Induced Draft ID fans with stack are installed at top of the Prilling Tower having diameter of 1.676 m (each).

No additional Stack is proposed in expansion and there shall be no gaseous emission from Nano Fertiliser Unit. There is generation of different kind of Industrial hazardous wastes from production process and other activities. Industrial hazardous wastes such as spent lube oil, spent catalyst are sold to recyclers. ETP sludge generated is disposed off at TSDF site, while other solid wastes are segregated in salable and non-salable waste.

All waste is disposed as per The Hazardous & Other Waste (Management and Transboundary Movement) Amendment Rules, 2020. Details are **given in Table**.

Table : Details of Solid Hazardous Waste Management

S. No	Name of Waste	Source of Generation	Category No. (As per Sch-I&II 2016)	Quantity			Mode of Treatment & Disposal Method
				Existing as per CCA	Proposed	After Modernization and Expansion	
1	Discarded Containers/ Bags /Liners	Storage & Handling of Raw Materials	Sch-I/33.3	1500 Nos/ year	-	1500 Nos/ year	Collected, Stored and is Sold to GPCB/CPCB approved Parties through M-Junction Kolkata
2	Used/Spent Oil	Used/Spent Oil	Sch-I/5.1	87 MTPA	-	87 MTPA	Collected and stored in MS drum, and is Sold to GPCB approved registered recyclers through M-Junction Kolkata.

3	ETP Sludge	In-house ETP	Sch-I/34.3	180 MTPA	-	180 MTPA	Collected in Drying Pits, stored in HDPE bags, Transported and disposed off to GPCB approved TSDF site for land filling.
Process Waste							
4	Spent Catalyst	Process	Sch –I/ 18.1	100 MTPA	-	100 MTPA	Collected and stored in MS drum / HDPE drums, Sold to GPCB/CPCB approved registered recyclers through M-Junction Kolkata.
5	Spent Carbon	Process	Sch–I/ 18.2	228 MTPA	-	228 MTPA	Collected and stored in HDPE bags, Transported and disposed off to GPCB approved TSDF site / Co-processing in cement industries.
6	Spent Resin	Process	Sch–I/ 34.2	228 M ³ /Year	-	228 M ³ /Year	Collected and stored in HDPE bags, Transported and disposed off to GPCB approved TSDF site / Co-processing in

							cement industries.
7	Plastic Waste	Bottling plant of Nano Fertilizer	-	0	0.6 MPTA	0.6 MPTA	Will be Sold/Disposed off to Registered recycler

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (iv). 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.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Safety and risk assessment studies shall be conducted and action plan and mitigation measures shall be properly implemented.

- (ix). 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 flame 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.
- (x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi). Total fresh water requirement shall not exceed 10371 cum/day proposed to be met from existing water supply from Narmada canal to the IFFCO Kalol unit. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xii). 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.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvi). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.8

Proposed project for manufacturing of formaldehyde 300 MT per day, located at village Ismalia, Tehsil Sampla, District Rohtak, Haryana by M/s PARNAMI BUILDCON PVT. LTD.- Consideration of Environmental Clearance

[IA/HR/IND2/126366/2019, IA-J-11011/358/2019-IA-II(I)]

The project proponent vide email dated 29.12.2020 has informed their inability to attend the meeting due to some emergency. The PP has also not submitted any documents. The EAC tried to understand the proposal but nobody was there to address the concerns raised by the respected members of the Committee. Based on the request of PP, the EAC has agreed to consider the proposal on receipt of request from the PP.

*After detailed deliberations by the EAC, as the PP was **absent** and the proposal may be placed before the EAC for further consideration as and when desired by the project proponent.*

Agenda No. 3.9

Pesticides Technical, Pesticides Intermediates Plant at Plot No DP-154, GIDC-Chemical Zone, Saykha, Tal: Vagra, Dist: Bharuch (Gujarat) by M/s Dharmaj Crop Guard Ltd, (Unit-II) - Consideration of Environment Clearance

[IA/GJ/IND2/131417/2019, IA-J-11011/419/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s Aqua-Air Environmental Engineers Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up Pesticides Technical and Pesticides Intermediates Manufacturing Plant of capacity 3100 TPM by M/s Dharmaj Crop Guard Limited (Unit-II) at Plot No. DP - 154, G.I.D.C. Chemical Zone, Saykha-II, Taluka Vagra, District Bharuch, Gujarat.

The list of products are as under:

S. No.	GROU P	NAME OF PRODUCTS	CAS NO.	QUANTIT Y (TPM)	LD 50 (mg/kg)
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		INSECTICIDES COMPOUNDS			
	Group- 1	SYNTHETIC PYRETHROIDS INSECTICIDES			
1		Cypermethrin Technical	52315-07-8	250	4123
2		Deltamethrin Technical	52918-63-5		5000
3		Bifenthrin Technical	82657-4-3		5000
4		Lamda Cyhalothrin Technical	91465-08-6		144
5		Permethrin Technical	52645-53-1		4000
6		Alphamethrin Technical	67375-30-8		400
7		Allethrin	584-79-2		1100
8		D-Alethrin	231937-89-6		1100
9		Transfluthrin	118712-89-3		5000
10		Prallethrin	23031-36-9		5000
11		Beta - Cyfluthrin	68359-37-5		77
12		Etofenprox	80844-07-1		2000
13		Fenpropathrin	39515-41-8		54
	Group- 2	NEO NICOTINOIDS INSECTICIDES			
14		Thiamethoxam Technical	153719-23-4	250	1563
15		Imidacloprid Technical	138261-41-3		450
16		Acetamiprid Technical	135410-20-7		217
17		Fipronil Technical	120068-37-3		97
18		Buprofezin Technical	69327-76-0		3847
19		Pymetrozine Technical	123312-89-0		5820
20		Thiacloprid	111988-49-9		177
	Group- 3	ORGANO PHOSPHORUS INSECTICIDES			
21		Profenofos Technical	41198-08-7	250	1178
22		Chlorpyrifos Ethyl Technical	5598-13-0		270

23		Chlorpyriphos Methyl	5598-13-0		2000
24		Temephos Technical	3383-96-8		3000
25		Malathion Technical	121-75-5		5400
26		Ethion Technical	563-12-2		191
27		Acephate Technical	30560-19-1		866
28		Dimethoate	60-51-5		387
29		Phenthoate Technical	2597-03-7		4728

Sr. No.	GROUP	NAME OF PRODUCTS	CAS NO.	QUANTIT Y (TPM)	LD 50 (mg/kg)
	Group -4	AROMATIC ETHERS, CARBAMATE, BENZOYL UREA, OXADIAZINE, PYRAZOLE & OTHER MIACELLENEOUS INSECTICIDES			
30		Diafenthiuron Technical	80060-09-9	250	2068
31		Fenobucarb Technical	3766-81-2		620
32		Propargite	2312-35-8		2639
33		Diflubenzuron	35367-38-5		4640
34		Thiocyclam Oxalate	31895-22-4		399
35		Fenpyroximate	134098-61-6		245
36		Etoazole	153233-91-1		>5000
37		Indoxacarb	173584-44-6		179
38		Hexythiazox	78587-05-0		>5000
39		Pyriproxyfen	95737-68-1		>5000
40		Thiodicarb	59669-26-0		325
41		Spirodiclofen	148477-71-8		>2500
42		Chlorantranniliprole	500008-45-7		>5000
43		Cyantraniliprole	736994-63-1		>5000
44		Neem Extract(Azadirachtin)	11141-17-6		>5000
45		Pyriithiobac	123343-16-8		3200
46		Tolfenpyrad	129558-76-5		77.2
47		Emamectin Benzoate	155569-91-8		81.5
48		Flonicamid	158062-67-0		884
49		Novaluron	116714-46-6	>5000	
		FUNGICIDES COMPOUNDS			
	Group -5	SBI-TRIAZOLE FUNGICIDES			
50		Hexaconazole Technical	79983-71-4	250	2189

51		Tebuconazole	105734-96-3		4000
52		Difenconazole	119446-68-3		1453
53		Propiconazole	60207-90-1		1500
54		Metconazole	125116-23-6		595
55		Cyproconazole	94361-06-5		<350
56		Epoxiconazole	135319-73-2		3160
57		Fenbuconazole	114369-43-6		>2000
58		Ipconazole	125225-28-7		888
59		Tetraconazole	112281-77-3		1031
60		Prothioconazole	178928-70-6		2200
61		Fluquiconazole	136426-54-5		112
62		Triticonazole	131983-72-7		>2000
63		Tricyclazole	41814-78-2		289.7
64		Myclobutanil	88671-89-0		1600
Sr. No.	GROUP	NAME OF PRODUCTS	CAS NO.	QUANTIT Y (TPM)	LD 50 (mg/kg)
	Group -6	STROBILURINS FUNGICIDES			
65		Pyraclostrobin	175013-18-0	250	>5000
66		Azoxystrobin	131860-33		>2000
67		Pyroxystrobin	131860-33-8		>5000
68		Picoxystrobin	117428-22-5		>5000
69		Fluoxastrobin	361377-29-9		>2000
70		Flufenoxystrobin	918162-02-4		NA
71		Trifloxystrobin	141517-21-7		>2000
72		Pyraclostrobin	175013-18-0		>5000
73		Kresoxim-Ethyl	143390-89-0		>5000
	Group -7	MULTICITE / SBI-Other DMIs / PHENYL AMIDES / SULFONYL UREAS/ ETHYL MERCAPTAN/PYRAZOLE FUNGICIDES			
74		Mancozeb	8018-01-7	250	4500
75		Propineb	12071-83-9		>5000
76		Thifluzamide	130000-40-7		>6500
77		Thiram	137-26-8		1000
78		Metalaxyl	57837-19-1		669
79		Thiophanate Methyl	23564-05-8		>5000
80		Chlorothalonil	1897-45-6		>10000
81		Isoprothiolane	50512-35-1		1190
82		Carbendazim	10605-21-7		>10000
83		Cymoxanil	57966-95-7		960

84		Validamycin	37248-47-8		20000
85		Quinoxifen	124495-18-7		>5000
86		Fluazinam	79622-59-6		>4100
87		Famoxadone	131807-57-3		>5000
88		Benalaxyl	71626-11-4		680
89		Triclopyricarb	902760-40-1		NA
90		Captan	133-06-2		8400
91		Carboxin	5234-68-4		3820
92		Copper Oxychloride	1332-40-7		299
93		Dodine	2439-10-3		1000
94		Iprobenfos(Kitazin)	26087-47-8		680
95		Zineb	12122-67-7		1850
96		Ziram	137-30-4		1400
97		Bixafen	581809-46-3		695
98		Isopyrazam	881685-58-1		2000
Sr. No.	GROUP	NAME OF PRODUCTS	CAS NO.	QUANTIT Y (TPM)	LD 50 (mg/kg)
		HERBICIDES COMPOUNDS			
	Group -8	ALS-IMIDAZOLINONE/UREAS/ALS-SULFONYLUREA-CONT/ALS-OTHERS			
99		Imazethapyr	81335-77-5	250	>5000
100		Imazamox	114311-32-9		>5000
101		Diuron	330-54-1		3750
102		Sulphosulfuron	141776-32-1		>5000
103		Penoxsulam	219714-96-2		>5000
104		Metasulfuron Methyl	74223-64-6		>5000
105		Mesosulfuron Methyl	208465-21-8		>5000
106		Chlorimuron Ethyl	90982-32-4		>4102
107		Bispyribac Sodium	125401-92-5		2635
108		Pyrozosulfuron Ethyl	93697-74-6		>5000
109		Florasulam	145701-23-1	5000	
110		Thiencarbazone Methyl	317815-83-1	>2000	
	Group -9	AMINO ACIDS/UREAS/CYCLOHEXANDIONES/DINITRO ANILINEES / ACETAMIDES HERBICIDES			
111		Glyphosate	1071-83-6	250	
112		Glufosinate Ammonium	77182-82-2		416
113		Pendimethalin	40487-42-1		>5000
114		Pretilachlor	51218-49-6		6099
115		Dicamba	1918-00-9		1707

116		Metribuzin	21087-64-9		2300
117		Atrazine	1912-24-9		3000
118		Metamitron	41394-05-2		1183
119		Napropamide	15299-99-7		5000
120		Dimethanamid	87674-68-8		397
121		Toramezone	210631-68-8		>2000
122		Propaxycarbazone	145026-81-9		>2000
	Group -10	ARYLOXYPHENOXYPROPIONATES / PPO- DIPHENYL ETHERS /			
123		Oxyflourfen	42874-03-3		5000
124		Quizalofop Ethyl	76578-14-8		1210
125		Clodinofof Propargyl	105512-06-9		1392
126		Fenoxaprop Ethyl	71283-80-2		2429
127		2,4-D Ethyl Ester	94-75-7	200	1646
128		Sulfentrazone	122836-35-5		>2855
129		2,4-D Sodium Salt	7084-86-8		555
130		Oxadiargil	39807-15-3		658
131		Propanil	709-98-8		2500
132		Isoproturon	34123-59-6		177
Sr. No.	GROUP	NAME OF PRODUCTS	CAS NO.	QUANTITY (TPM)	LD 50 (mg/kg)
	Group - 11	PLANT GROWTH REGULATORS & ROTENTICIDES			
133		Chlormequate Chloride	999-81-5.		115
134		Ethephone	16672-87-0		3400
135		Forchlorofenuron	68157-60-8		>4917
136		Gibbralic Acid	77-06-5	250	6300
137		Mepiquate Chloride	24307-26-4		200
138		Bromadiolon	28772-56-7		NA
139		Paclobutazol	76738-62-0		1336
	Group - 12	ADVANCE SPECIFIC PESTICIDE INTERMEDIATES			
140		Meta Phenoxy Benzaldehyde	39515-51-0		1215
141		Meta Phenoxy Benzyl Alcohol	13826-35-2		1496
142		Cypermethric Acid Chloride & its all Isomers	7726-95-6	400	NA
143		Lamda Cyhalothric Acid	72748-35-7		NA
144		Tri Methyl Phosphite (TMP)	121-45-9		1600

145		Di-Ethyl Thiophosphoryl Chloride (DETCI)	2524-04-1		1340
146		Di-Methyl Thiophosphoryl Chloride(DMTCI)	2524-03-0		540
147		NaTCP (Sodium Salt of 3,5,6 Tri Chloro Pyridinol)	37439-34-2		NA
148		DMPAT (Di Methyl Phophoro Aceto Thioate)	17321-47-0		2240
149		PSCI3 (Phosphorus Tri Chloride)	3982-91-0		NA
150		POCI3 (Phosphorus Oxy Chloride)	10025-87-3		380
151		PCI3 (Phosphorus Oxy Chloride)	7719-12-2		380
152		CCMP (2- Chloro 5- Chloromethyl Pyridine)	70258-18-3		NA
153		CCMT (2- Chloro 5- Chloromethyl Thiazol)	105827-91-6		NA
154		NII (2- Nitro Imino Imidazolidine)	5465-96-3		NA
155		MNIO (2- Methyl 5- Nitro 1,3,5 Oxidiazine)	696-23-1		3914
156		4-HPPA- 2-(Hydroxyphenoxy) Propionic Acid	67648-61-7		NA
157		Transfluthrin Acid Chloride	52314-67-7		583
158		Para Chloro Isovaleric Acid Chloride	51631-50-6		NA
159		PEG Ester	1603-79-8		NA
160		Propargyl Chloride	624-65-7		NA
161		1,2,4-Triazol	288-88-0		1648
		TOTAL		3100	

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR has been issued by Ministry vide letter dated 22nd January 2020. Public hearing is exempted, as the project site is located in the Industrial area. It was informed that there is no litigation pending against the proposal.

The land area available for the project is 33489.73 sqm. Industry will develop Greenbelt in an area of 11050 sqm covering 33% of total project area. The estimated project cost is Rs. 132 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 Crores and the Recurring cost (operation and maintenance) will be about Rs. 42.11 Crores per annum. Total Employment will be 200 persons as direct & indirect for project. Industry proposes to allocate Rs 1.98 Crores (approx.) in next 2 years towards Corporate Environment Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.

Ambient air quality monitoring was carried out at 8 locations during October 2019 to December, 2019 and submitted baseline data indicates that ranges of concentrations of PM10 (71.73 – 76.59 µg/m³), PM2.5 (41.34 – 44.12 µg/m³), SO₂ (10.67 – 13.54 µg/m³) and NO₂ (11.15 – 15.31 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.23206 µg/m³, 0.17067 µg/m³, 0.07468 µg/m³, 0.02529 µg/m³, 0.01264 µg/m³, 0.00674 µg/m³ with respect to SPM, Sox & NO_x. The resultant concentrations are within the National Ambient Air Quality Standards.

Total fresh water requirement is 450 m³/day proposed to be met from GIDC Water Supply. Effluent of 400 m³/day quantity shall be treated through comprehensive effluent treatment in proposed project comprising of Fenton Treatment, In-house MEE, SBT, Primary Treatment of ETP. Final treated water of 375 m³/day quantity shall be sent to CETP Saykha for final treatment & disposal. 10 KLD Domestic wastewater will be disposed through Septic Tank/Soak Pit.

Power requirement for proposed project will be 2000 KVA and will be met from DGVCL. 2 Nos. DG set of 500 KVA capacity shall be used as standby during power failure. Stack (height 11 m) will be provided as per CPCB norms to the proposed DG sets of 500 KVA which will be used as standby during power failure.

Unit shall have 1 Nos. of Steam Boiler (8 MT/Hr) - Natural Gas = 14000 SCM/Day., 1 Nos. of Thermopack (Cap: 2 * 1000 U) - Natural Gas = 1200 SCM/Day., 2 Nos. of D.G Set - Diesel = 200 Liter/Day will be installed. Adequate Stack height will be provided. Stack of height of 11 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm³) respectively.

Details of Process emissions generation and its management.

1) Flue Gas Stack

S. no	Source of emission	Stack Height (m)	Fuel	Quantity of fuel MT/Day	APCM	Emission Standards
.						

1	Steam Boiler (Capacity:8.0 MT/hr)	18 m	Natural gas	14000 SCM/Day	Adequate stack height	PM <150 mg/Nm ³ SO ₂ <100 ppm NOx<50 ppm
2	Thermo Pack (Capacity: 2 x 1000 U)	11 m		1200 SCM/Day	Adequate stack height	
3	D. G. Set -2 Stand By (Capacity :2X(500 KVA)	11 m	HSD	200 Liter/Day	Adequate stack height	

2) Process Stack

Sr. no.	Specific Source of emission (Name of the Product & Process)	Type of emission	Stack/Vent Height (meter)	Permissible Limit	Air Pollution Control Measures (APCM)
1	Reaction Vessel	HCl	11 m	20 mg/Nm ³	Two Stage Water Scrubber
2	Reaction Vessel	HBr	11 m	35 mg/Nm ³	Two Stage Water Scrubber
3	Reaction Vessel	Cl ₂	11 m	9 mg/Nm ³	Two Stage Caustic Scrubber
4	Reaction Vessel	HCl & SO ₂	11 m	20 mg/Nm ³ 40 mg/Nm ³	Two Stage Scrubber with 1st Water & 2nd Alkali
5	Reaction Vessel	HCl & Cl ₂	11 m	20 mg/Nm ³ 9 mg/Nm ³	Two Stage Scrubber with 1st Water & 2nd Alkali

Details of Solid waste/ Hazardous waste generation and its management: 20 categories of hazardous waste ETP Sludge, Discarded Drums/Bags/liners, Used oil, MEE salt, Distillation Residue, spent solvent, Spent catalyst, Spent sulfuric acid, KCl (inorganic salt), HCl solution, Sodium sulfite, Aluminium chloride, Benzyl chloride etc.

Disposal of Hazardous Waste : ETP Sludge, NaCl salt, MEE salt & Inorganic Mixed Salt from Process will be Collected, Stored, Transported and Disposal at nearest TSDF site; Used Oil will be Collected, Stored and Transported & Sent to registered recycler; Discarded barrels/ containers/ liners will be Collected, Stored, Transported & Sell to GPCB approved scrap vendor; Distillation residue, Organic Process Waste & Spent Catalyst will be Collected, Stored, Transported & disposal at Co-processing in cement industries or to common incineration facility; Spent solvent will be Collection, Storage, Recovery & reuse within premises; By-Products will be sold under rule 9.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has suggested the PP to initiate greenbelt development for abatement of pollution.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Treated effluent of 375 cum/day proposed to be discharged to CETP Saykha shall conform to the standards prescribed under the Environment (Protection) Act, 1986.

Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

- (iii). No banned pesticides shall be manufactured.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Based on the Safety and risk assessment studies conducted, action plan and mitigation measures proposed shall be implemented and compliance status shall be submitted to the Ministry's Regional Office/ concerned SPCB.
- (ix). 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.
- (x). 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 flame 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.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.

- (xii). Total fresh water requirement shall not exceed 450 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvii). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.10

Agrochemical manufacturing specialty Chemicals Plant (52000 TPA Technical & 50000 TPA Formulations) & 12 MW Captive Power Plant at Plot No. CZ-44, GIDC Estate-Dahej, Tehsil: Vagra, Dist. Bharuch, Gujarat by M/s Rallis India Limited - Consideration of Environment Clearance

[IA/GJ/IND2/119775/2019, IA-J-11011/289/2019-IA-II(I)]

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

The proposal is for Environmental Clearance to the project for Agrochemical and Specialty Chemical (Technical Pesticide & Pesticide Intermediates) of capacity 52000 MTPA (Technical Pesticide) and 50000 MTPA (Pesticide Formulation)] manufacturing along with 12 MW Captive Power Plant at CZ 44, GIDC Estate, Dahej, Tehsil Vagra, District Bharuch, Gujarat by M/s Rallis India Limited.

The details of products and capacity are as under:

S. No.	Name of the Product	CAS no.	LD₅₀ value (mg/kg)	Capacity (TPA)	End use (Insecticides, herbicides, fungicides etc.)
1.	Pendimethalin	40487-42-1	1050	2000	Herbicide
2.	Metribuzin	21087-64-9	1100	2000	Herbicide
3.	Hexaconazole	79983-71-4	2189	1000	Fungicide
4.	Metalaxyl	57837-19-1	669	300	Fungicide
5.	Kresoxim- Methyl	143390-89-0	5000	500	Fungicide
6.	Prothioconazole	178928-70-6	6200	1000	Fungicide
7.	Mesotrione	104206-82-8	>2000	1000	Herbicide
8.	Sulfentrazone	122836-35-5	>2250	1200	Herbicide
9.	Fomesafen	72178-02-0	1860	300	Herbicide
10.	Trinexapac Ethyl	95266-40-3	>2000	800	PGR
11.	Isoxaflutole	141112-29-0	>2000	800	Herbicide
12.	Tembotrione	335104-84-2	>2000	800	Herbicide
13.	Bispyribac Sodium	125401-92-5	2635	500	Herbicide
14.	Carfentrazone	128621-72-7	>5000	500	Herbicide
15.	Penthiopyrad	183675-82-3	>5000	200	Fungicide
16.	Paclobutrazol	76738-62-0	1300	300	Plant growth regulators
17.	Cyazofamid	120116-88-3	>2000	200	Fungicide
18.	Prosulfocarb	52888-80-9	1820	1000	Herbicide
19.	Thiencarbazone Methyl	317815-83-1	>2000	800	Herbicide
20.	Pyroxasulfone	447399-55	2250	500	Herbicide
21.	Difenoconazole	119446-68-3	1453	500	Fungicide
22.	Thiophanate–Methyl	23564-05-8	6640	800	Fungicide
23.	Lambda–Cyhalothrin	91465-08-6	228	500	Insecticide
24.	Thiamethoxam	153719-23-4	871	500	Insecticide
25.	Trifloxystrobin	141517-21-7	>2000	1000	Fungicide

26.	Trifloxysulfuron	199119-58-9	>2000	1000	Herbicide
27.	Bixafen	581809-46-3	>2000	1000	Fungicide
28.	Bicyclopyrone	352010-68-5	>5000	1000	Herbicide
29.	Triafamone	874195-61-6	>2000	800	Herbicide
30.	Flupyradifurone	951659-40-8	>2000	800	Insecticide
31.	Fenoxycarb	72490-01-8	>2000	1000	Insecticide
32.	Acetamiprid	135410-20-7	>2000	800	Insecticide
33.	Valerophenone	1009-14-9	2001	1000	Fungicide
34.	Cypermethrin	52315-07-8	250	450	Insecticide
35.	1,2,4-Triazole	288-88-0	1320	4000	Intermediate
36.	Thiacarbohydrzide (TCH)	2231-57-4	500	2000	Intermediate
37.	NAX (N-alkylated-Ortho-Xylene or N-Ethyl Propyl 3,4-Dimethyl Benzene Amine)	---	500	1500	Intermediate
38.	Chlorantraniliprole	500008-45-7	>5000	500	Insecticide
39.	Bifenthrin	82657-04-3	210	500	Insecticide
40.	Fluthiacet methyl	117337-19-6	>5000	200	Herbicide
41.	Atrazine	1912-24-9	3090	2000	Herbicide
42.	Chlorothalonil	1897-45-6	5000	500	Fungicide
43.	Pyrazosulfuron-ethyl	93697-74-6	>2000	300	Herbicide
44.	Tricyclazole	41814-78-2	250	500	Fungicide
45.	Triazinone	---	2250	3000	Intermediate
46.	2-(4-phenylbenzoyl) benzoic acid (PBBA)	85-52-9	880	100	Intermediate
47.	Di Ethyl Ketone	96-22-0	2900	1500	Raw Material
48.	Dithianon	3347-22-6	300	500	Fungicide
49.	HMBT	20174-68-9	300	500	Intermediate
50.	2-Methyl Acetophenone	577-16-2	1400	400	Intermediate
51.	Emamectin Benzoate	155569-91-8	165	300	Insecticide
52.	Clodinafop	114420-56-3	1392	500	Herbicide
53.	Imazethapyr	81335-77-5	>5000	500	Herbicide
54.	Propiconazole	60207-90-1	1517	500	Fungicide
55.	Meta-Bromo benzaldehyde	3132-99-8	>5000	2000	Intermediate
56.	Meta-Phenoxy benzaldehyde	39515-51-0	1222	2000	Intermediate
57.	4-Fluoro-meta-Phenoxybenzaldehyde	68359-57-9	--	500	Intermediate
58.	Metalaxyl M	70630-17-0	375	200	Fungicide

59.	o-Methyl Hydroxylamine Hydrochloride	593-56-6	--	150	Intermediate
60.	Bromoimino Ester	---	1100	500	Intermediate
Total				52000	
61.	Agro Chemical Formulations				
(a)	Formulation (Solid)	--	--	25000	--
(b)	Formulation (Liquid)	--	--	25000	--
62.	Pilot Plant (For R&D Purpose Only)	--	--	10 MT	--
63.	Captive Power Plant	--	--	12 MW	--

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR has been issued by Ministry vide letter dated 03/11/2019. Public hearing is exempted as the project site is located in the notified Industrial area. It is informed that there is no litigation pending against the proposal.

The land area available for the project is 550000 sqm. Industry will develop greenbelt in an area of 33% i.e. 182100 m², out of total area of the project. The estimated project cost is Rs. 800 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 50.0 Crore and the Recurring cost (operation and maintenance) will be about Rs. 10.0 Crore per annum. Total employment including direct and indirect will be 800 persons. Industry proposes to allocate Rs. 11 Crore towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Gulf of Khambhat is at a distance of 3.5 km in W direction and Narmada River is at a distance of 5 km in SSE direction.

Ambient air quality monitoring was carried out at 8 locations during December, 2019 to February, 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (62.9 - 77.1 µg/m³), PM_{2.5} (31.0 - 39.7 µg/m³), SO₂ (12.0 - 15.9 µg/m³) and NO_x (17.9 - 24.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 5.193 µg/m³, 4.739 µg/m³, 6.238 µg/m³, 2.174 µg/m³, 0.249 µg/m³, 0.079 µg/m³, 0.449 µg/m³, 0.207 µg/m³ and 0.177 µg/m³ with respect to SPM, SO₂, NO_x, HCl, HBr, Br₂, Cl₂, H₂S and NH₃. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be 7935 m³/day of which fresh water requirement of 3585 m³/day will be met from GIDC water supply. 4350 m³/day will be recycled/treated water.

Total industrial effluent generation will be 5555 KLD. Process effluent will be divided into three parts - Process waste/ waste residue containing Pesticide (72 KLD), High COD/TDS (636 KLD) and Low COD/TDS (5447 KLD). Process waste/ waste residue containing Pesticide (72 KLD) will be segregated at the source and sent to Incinerator. High COD/high TDS stream will be passed through Solvent stripper, Organic waste sent to Incinerator and Aqueous will be treated in "ETP-1" followed by MEE and ATFD. Thus process effluent will be achieving Zero Liquid Discharge (ZLD), Condensate of MEE (600 KLD) will be further treated with Low COD/Low TDS process stream from Lab, Scrubber, washing and utilities. This dilute stream will be treated into "ETP-2" and after treatment and achieving GPCB discharge norms, it will be pass through RO and RO permeated will be reused and reject from RO as per the GPCB norms will be disposed into Deep Sea through Dahej-GIDC Discharge system. Domestic wastewater will be treated in STP and utilized for Greenbelt development.

Power requirement will be 16 MW and will be met from 12 MW Captive Power Plant / State grid (DGVCL) and 4.0 MW Solar power. Unit will install five D.G. Sets of 1500 kVA x 2 nos. and 1000 kVA x 3 nos. and will be used as standby during power failure. Stack (height 21 meters) will be provided as per CPCB norms to the proposed D.G. Sets.

In proposed unit, 7 nos. of Natural gas/LDO/Briquette/Coal fired Boilers (5 TPH x 2 nos., 10 TPH x 4 nos. and 60 TPH x 1 no.), Two Natural gas fired Thermic Fluid Heater (4 lacs KCal/hr. and 1 lacs KCal/hr.) will be installed. Water scrubber & ESP with stack height of 30 m & 35 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed utilities.

There will be total 62 nos. of process vents. Details of Process emissions and its management (APCM) is as below.

S. No	No. of Process Stack	Name of Product	Stack attached to	Pollutant	APCM Measures
1	Process Stack No.01	Pendimethalin	Nitration	NOx	Water + Caustic Scrubber
2	Process Stack No.02		Denitrosation	NOx/HCl	Water + Caustic Scrubber
3	Process Stack No.03	Metribuzin	TCH	H ₂ S	Water + Caustic Scrubber
4	Process Stack No.04		Methylation	CO ₂ /H ₂ S	Water + Caustic Scrubber

5	Process Stack No.05	Hexaconazole	VACL Preparation	SO ₂	Water + Caustic Scrubber
6	Process Stack No.06		VAP Stage 2	HCl	Water + Caustic Scrubber
7	Process Stack No.07	Metalaxyl	MDMPA Preparation II	SO ₂	Water + Caustic Scrubber
8	Process Stack No.08	Kresoxim-Methyl	K Acid (Chlorination)	SO ₂ /Cl ₂	Water + Caustic Scrubber
9	Process Stack No.09	Kresoxim-Methyl	K Keto ester	HCl	Water + Caustic Scrubber
10	Process Stack No.10	Sulfentrazone	Step 1	Cl ₂	Water + Caustic Scrubber
11	Process Stack No.11	Sulfentrazone	3 Nitration	NO _x	Water + Caustic Scrubber
12	Process Stack No.12	Fomesafen	1. Nitration	NO _x	Water + Caustic Scrubber
13	Process Stack No.13	Fomesafen	2. Chlorination	Cl ₂	Water + Caustic Scrubber
14	Process Stack No.14	Tembotrione	1	HCl	Water + Caustic Scrubber
15	Process Stack No.15	Tembotrione	2	SO ₂	Water + Caustic Scrubber
16	Process Stack No.16	Carfentrazone	Step 1	Cl ₂	Water + Caustic Scrubber
17	Process Stack No.17	Carfentrazone	3 Nitration	NO _x	Water + Caustic Scrubber
18	Process Stack No.18	Carfentrazone	5. Final	Cl ₂	Water + Caustic Scrubber
19	Process Stack No.19	Paclobutrazol	Single step	HCl	Water + Caustic Scrubber
20	Process Stack No.20	Cyazofamid	1	HCl/Cl ₂ /SO ₂	Water + Caustic Scrubber
21	Process Stack No.21	Cyazofamid	3	Cl ₂	Water + Caustic Scrubber
22	Process Stack No.22	Lambda - Cyhalothrin	1	HCl/SO ₂	Water + Caustic Scrubber
23	Process Stack No.23	Thiamethoxam	Single	HCl	Water + Caustic Scrubber
24	Process Stack No.24	Triafamone	1	Cl ₂ /SO ₂	Water + Caustic Scrubber

25	Process Stack No.25	Flupyradifurone	1	CO ₂ /HCl	Water + Caustic Scrubber
26	Process Stack No.26	Valerophenon	1	SO ₂ /HCl	Water + Caustic Scrubber
27	Process Stack No.27	1,2,4-Triazole	1	NH ₃	Water/H ₂ SO ₄ Scrubber
28	Process Stack No.28	Thiacarbohydrzi de (TCH)	1	H ₂ S	Water + Caustic Scrubber
29	Process Stack No.29	Chlorantranilprole	1	HCl	Water + Caustic Scrubber
30	Process Stack No.30	Chlorantranilprole	2	SO ₂ /HCl	Water + Caustic Scrubber
31	Process Stack No.31	Fluthiacet methyl	1	HCl/C O ₂	Water + Caustic Scrubber
32	Process Stack No.32	Atrazine	1	HCl	2 nd Stage water & Cuastic Scrubber
33	Process Stack No.33	Chlorothalonil	1	Cl ₂	Water + Caustic Scrubber
34	Process Stack No.34	Chlorothalonil	2	CO ₂ /HCl/Phosgene	1 st Solvent, 2 nd Water, 3 rd Caustic Scrubber
35	Process Stack No.35	Dithianon	1	H ₂ S	Water + Caustic Scrubber
36	Process Stack No.36	Dithianon	2	Cl ₂ /HCl	Water + Caustic Scrubber
37	Process Stack No.37	propiconazole	1	HCl	Water + Caustic Scrubber
38	Process Stack No.38	propiconazole	3	HBr	Alkali Scrubber
39	Process Stack No.39	Bromo iminoester	1	SO ₂ /HCl	Water + Caustic Scrubber
40	Process Stack No.40	Bromo iminoest	4	SO ₂ /HCl	Water + Caustic Scrubber
41	Process Stack No.41	4-Fluoro-meta-Phenoxy benzaldhyde	1	HCl	Alkali Scrubber
42	Process Stack No.42	4-Fluoro-meta-Phenoxy benzaldhyde (Bromination)	2	HBr	Alkali Scrubber

43	Process Stack No.43	4-Fluoro-meta-Phenoxy benzaldehyde (Bromination)	4	SO ₂	Water + Caustic Scrubber
44	Process Stack No.44	Meta-Bromobenzaldehyde	1	HBr	Alkali Scrubber
45	Process Stack No.45	Metalaxyl-M	1	Cl/Cl ₂ /SO ₂	Water + Caustic Scrubber
46	Process Stack No 46	Meta-Phenoxy benzaldehyde	1	Cl-Br/HCl	Alkali Scrubber
47	Process Stack No.47	O-Methylhydroxylamine hydrochloride	1	SO ₂	Caustic Scrubber
48	Process Stack No.48	Incinerator-1	1	Common Parameters applicable to Incinerator	Alkali Scrubber
49	Process Stack No 49	Incinerator-2	2		
50	Process Stack No 50	Pilot Plant	1	HC+VOC	Carbon absorption Tower
51	Process Stack No 51	CPP	1	-	As Applicable
52	Process Stack No 52	Thermic Oxidiser (Thermopack)	Process Vent Utility	SO ₂ /NO ₂	Water Scrubber/Bag filter
53	Process Stack No 53	Common Scrubber	-	-	-
54	Process Stack No 54	VOC System (HC & VOC) - 05 Nos	-	HC & VOC	Water chiller + Carbon Tower
55	Process Stack No 55	Plant Storage Tank (05 Nos) like POCl ₃	Storage Tank	-	Caustic/HCl Scrubber

56	Process Stack No 56	Plant Storage Tank (05 Nos) like POCl ₃	Storage Tank	-	Caustic/HCl Scrubber
57	Process Stack No 57	QC/QA Lab	-	-	Caustic/Suitable
58	Process Stack No 58	Spent Acid Treatment	-	-	Water
59	Process Stack No 59	ETP Deodourization system	-	-	Water
60	Process Stack No 60	Ejectors	-	HC/OC	Water chiller + Carbon Tower
61	Process Stack No 61	Formulation	-	PM	Bag Filters
62	Process Stack No 62	Formulation	-	HC/OC	Water chiller + Carbon Tower

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

S. No.	Type of Waste	Category of Waste as per HWM Rules 2016	Quantity	Disposal facility
1.	ETP Sludge	35.3	7500 MTPA	Collection, Storage, Transportation & Disposal at TSDF site approved by GPCB.
2.	Salt from MEE	35.3	4875 MTPA	Collection, Storage, Transportation & Disposal at TSDF site approved by GPCB.
3.	Inorganic Salts from Process	29.1	14400 MTPA	Collection, Storage, Transportation & Disposal at TSDF site approved by GPCB.
4.	Distillation Residue	20.3	200 MTPA	Collection, Storage, Transportation, Disposal through own Incinerator or at CHWIF or send for co-processing in cement kiln after approval from concern authorities.
5.	Process waste/waste residue containing Pesticide	29.1	23400 MTPA	Collection, Storage, Transportation, Disposal through own Incinerator.

6.	Spent Catalyst	29.5	50 MTPA	Collection, storage & Incineration in house or in approved common incineration facility or co-processing, Send to Authorized recyclers/ re-processors for recovery or sent for regeneration to supplier.
7.	Used /Spent oil	5.1	8.0 KLPA	Collection, storage & sold to registered re-processors register with SPCB.
8.	Discarded containers & Discarded bags liners	33.1	60000 Nos./ year & 200 MTPA	Collection, storage & sold to registered register recycler.
9.	Date expired / off specification products	29.3	20 MTPA	Collection, Storage, Transportation, Disposal through own Incinerator or at CHWIF or send for co-processing in cement kiln after approval from concern authorities.
10.	Incineration Ash	37.2	2000 MTPA	Collection, Storage, Transportation & Disposal in approved common TSDf site.

Details of by products and its management

S. No.	Name of by Product	Proposed (TPA)	Generated from	Mode of disposal
1.	Spent Sulphuric Acid (< 70 %)	16000	Pendi/Metri	End-user as per Rule 09 of HW Rules
2.	Spent Sulphuric Acid (40-50 %)	12000	Pendi/Metri	End-user as per Rule 09
3.	Sodium hydrosulfide hydrate (NaSH)	3212	Metri/TCH	End-user as per Rule 09
4.	Hydrogen Sulfide (H ₂ S)	36.5	Metri/TCH/Acetamaprid/Triaflamone	End-user as per Rule 09
5.	Sodium Sulphate (Na ₂ SO ₄)	25776	Fomesafen/Valerophenone/O-Methylhydroxylamine Hydrochloride	End-user as per Rule 09
6.	Sod.bisulfite	8409	Metalaxyl	End-user as per Rule 09

S. No.	Name of by Product	Proposed (TPA)	Generated from	Mode of disposal
7.	Potassium Sulphate (K ₂ SO ₄)	1131	Prothioconazole/Pyrazosulfunran-ethyl	End-user as per Rule 09
8.	Spent acid Nitric (HNO ₃) (< 40 %)	3416.4	Carfentrazole/Fomesufen/Sulfentrazole/Pendi	End-user as per Rule 09
9.	Sod. Sulphate Solution (20 % to 32 %)	10512	Metri/Fomesafen/ Valerophenon/ O-Methylhydroxylamine Hydrochloride	End-user as per Rule 09
10.	Sodium Chloride (NaCl)	9814.85	Trinexapac ethyl/Isoxafluole/Lambda/Bicyclopyrone/Cypermetrin/Atrazine/Dithianon	End-user as per Rule 09
11.	Manganese Oxide (MnO ₂) (28-30 %) or	2920	Trinexapac ethyl	End-user as per Rule 09
12.	Manganese Oxide (MnO ₂) (<50%)	2920	Trinexapac ethyl	-
13.	Sodium Hydroxide (NaOH)	2337.7	Isoxaflutole/Triafamone	End-user as per Rule 09
14.	Sodium Methane Sulfinat	237.25	Bispyribac Sodium	End-user as per Rule 09
15.	Potassium Chloride (KCL) (< 40 %)	1825	Carfentrazole/Triafamone/Fenoxycarb/Fluthiacet Methyl	End-user as per Rule 09
16.	Spent Methanol	164.25	Penthiopyrad/Esmamect in Benzoate	End-user as per Rule 09/Sale
17.	Sodium Bromide(NaBr)	1576.8	Pyroxasulfane/ Propicanazole/4-Fluoromethoxybenzaldehyde	End-user as per Rule 09
18.	Potassium Bicarbonate(KHCO ₃)	365	Thiamethoxane/ Fenoxycarb	End-user as per Rule 09
19.	N Succinimide	146	Trifloxystrobin	End-user as per Rule 09/Sale
20.	Potassium Bromide (KBR)	1752	Difenoconazole/ Trifloxystrobin/ Bixafen/ Propiconazole	End-user as per Rule 09
21.	Zinc Chloride (ZnCl ₂)	321.2	Bicyclopyrone	End-user as per Rule 09
22.	Sodium Bisulphate	7409	Triafamone	End-user as per Rule 09

S. No.	Name of by Product	Proposed (TPA)	Generated from	Mode of disposal
23.	Methyl Amine	635.1	Metri/Triaflamone/Acetamapride	End-user as per Rule 09
24.	Triethylamine hydrochloride	73	Chlorantraniliprole	End-user as per Rule 09
25.	Sulfur dioxide	394.2	Bifenthrin	
26.	Pentyl amine	54.75	Pyrazosulfuron-ethyl	End-user as per Rule 09
27.	Ammonium Chloride (NH ₄ Cl) or	730	Trinexapac ethyl/HMBT/Bromo iminoester	End-user as per Rule 09
28.	Ammonium Chloride (NH ₄ Cl) Solution	2460	Trinexapac ethyl/HMBT/Bromo iminoester	End-user as per Rule 09
29.	P-Toluene sulfonic acid	73	Clodinafop	End-user as per Rule 09
30.	Spent Acetone	146	Clodinafop	End-user as per Rule 09/Sale
31.	Potassium Fluoride (KF)	182.5	Clodinafop	End-user as per Rule 09
32.	Sodium Iodide (NaI)	1277.5	Metalaxyl M	End-user as per Rule 09
33.	Potassium Bromide (KBr) or	730	Trifloxystrobin/Bixafen/proiconazole/Meta-Phenoxy benzaldehyde	End-user as per Rule 09
34.	Potassium Bromide (KBr) Solution	2460	Trifloxystrobin/Bixafen/proiconazole/Meta-Phenoxy benzaldehyde	End-user as per Rule 09
35.	Sodium Nitrate Solution (10-15 %)	2555	Scrubber Solution from Spent Nitric Scrubber	End-user as per Rule 09
36.	Cuprous chloride (Cu ₂ Cl ₂)	547.5	Metribuzin/Trinexapac ethyl	End-user as per Rule 09
37.	Aluminum chloride (AlCl ₃)	3588	Hexaconazole/Valerophenon/Meta-Bromobenzaldehyde	End-user as per Rule 09
38.	Ammonia Solution	1861.5	Kresoxim-Methyl/1,2,4-Triazole/HMBT	End-user as per Rule 09
39.	Disodium hydrogenphosphate	2482	Fomesafen	End-user as per Rule 09
40.	Caustic Solution (10-15 %)	5475	Sulfentrazone/Carfentrazone/Scrubber solution	End-user as per Rule 09

S. No.	Name of by Product	Proposed (TPA)	Generated from	Mode of disposal
41.	Recovered Acetic Acid	803	2-Methyl Acetophenone	End-user as per Rule 09/Sale
42.	Spent Acid Hydrochloride (HCL) (< 30 %)	3285	Sulfentrazone/Tembotrione/ Penthiopyrad/ Paclobutrazol/ Cyazofamid/ LambdaCyhalothrin/ Thiamethoxam/ Triafamone/Flupyradifurone/Fenoxycarb/Acetamaprid/Bifenthrin/ Fluthiacet methyl/ HMBT etc.	End-user as per Rule 09/sale
43.	Dicalcium Phosphate (DCP)	1825	Salt of Acids	End-user as per Rule 09
44.	Ethylene Glycol	292	4-Fluoro-meta-Phenoxybenzaldehyde/M eta-Phenoxy benzaldehyde	End-user as per Rule 09/Sale
45.	Aluminium hydroxide	5000	Hexaconazole/ Valerophenon/Meta-Bromobenzaldehyde	End-user as per Rule 09

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC

due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has suggested the PP to initiate greenbelt development for abatement of pollution.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Treated effluent 1247 m³/day proposed to be discharged to deep sea through Dahej GIDC discharge system shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). No banned pesticides shall be manufactured.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Based on the Safety and risk assessment studies conducted, action plan and mitigation measures proposed shall be implemented.
- (ix). 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.
- (x). 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 flame 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.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xii). Total fresh water requirement shall not exceed 3585 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products

from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.

- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvii). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.11

Modernization of existing DAP plant from 606100 MTPA to 900000 MTPA under 7 (II) of EIA notification by M/s Greenstar Fertilizers Limited located at SPIC Nagar, District Tuticorin, Tamil Nadu -Consideration of Environment Clearance [IA/TN/IND2/186585/2020, J-11011/620/2009-IA-II(I)]

The Project Proponent made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Modernization cum Expansion of DAP plant from 606100 MTPA to 900000 MTPA by M/s Greenstar Fertilizers Limited located at SPIC Nagar, District Tuticorin, Tamil Nadu. It is proposed to modernize the existing DAP Plants with capacity enhancement from 606100 MTPA to 900000 MTPA (Grade 18:46:0:0 and 20:20:0:13) by debottlenecking and increase in stream days of operation from 320 days to 340 days.

The details of products and capacity are as under:

S.No	Product	Existing	Proposed	Total	
1.	Di-Ammonium Phosphate	606100 MTPA	239300 MTPA	DAP I Train (18:46:0) – 513420 MTPA	900000 MTPA
				DAP II Train (Complex 20:20:0:13) – 386580 MTPA	
2.	Aluminium fluoride	10000 MTPA	--	10000 MTPA	
3.	Single super phosphate	350 MTPD	--	350 MTPD	

The project/activities are covered under category A of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal has been submitted under para 7 (ii) of the EIA Notification, 2006 for modernization of the plant by debottlenecking, requesting exemption from ToR, EIA and PH. It is informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide F. No. J-11011/171/2007 IA-II (I) dated 05th March 2008 "Expansion of urea and DAP" at Southern Petrochemical fertilizer complex" in favour of M/s. Southern Petrochemical Industries Corporation Limited which has been amended/Bifurcated by Ministry vide F. No. J-11011/171/2007 IA-II (I) dated 20th May 2019 to the existing project "Expansion of urea and DAP at Southern Petrochemical fertilizer complex, Tuticorin (Tamil Nadu) in favour of M/s Greenstar Fertilizers Limited" for the products 606100 MTPA of DAP and 10000 MTPA of Aluminium Fluoride.

Ministry had also issued EC earlier vide F.No. J/11011/620/2009/-IA-II (I) dated 18.03.2010 for Installation 350 TPD of Single super phosphate in favour of M/s.Southern Petrochemical Industries Limited has been transferred by Ministry vide F.No.J/11011/620/2009/-IA-II (I) dated 11.01.2019 to M/s Greenstar Fertilizers Limited. M/s Greenstar Fertilizers Limited, Tuticorin has ownership of Di Ammonium Phosphate, Aluminium Fluoride and Single Super Phosphate Unit.

Certified compliance report of the exiting environmental clearance conditions has been forwarded by the Ministry's regional Office at Chennai vide letter No. EP/12.1/882/TN/1343 dated 31.07.2019.

Existing land area is 564253 m². The proposed modernization will be carried out within the existing unit. There is no additional land required for this modernization project. Industry has already developed greenbelt in an area of 34.7% i.e., 196000 m² out of total area of the plant.

The estimated project cost is Rs. 20 crores including existing investment of Rs.484.74 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.2 Crores and the Recurring cost (operation and maintenance) will be about Rs.0.25 Crores per annum. Total Employment will be 700 persons and there is no additional manpower required after the modernization. Industry proposes to allocate Rs.0.2 Crore towards Corporate Environment Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Tamirabarani is flowing at a distance of 20 Km in south direction.

Total water requirement is 4046 m³/day of which fresh water requirement of 2591m³/day will be met from Tamilnadu Water supply and Drainage Board through M/s. SPIC Ltd and 1455 m³/day of Treated effluent will be met from SPIC. There is no additional water requirement for this modernization project. There is no effluent generation in the existing plant and is a Zero Liquid Discharge Plant. There will be no effluent generation after the modernization.

Power requirement for existing and proposed modernization will be 7 MW which is met from Tamil Nadu Electric Board and from Co-generation plant of 6MW capacity. There is no additional power requirement for this modernization project. Existing unit has 1 x 1500 KVA and 1 X 750 KVA DG sets of capacity, DG sets are used as standby during power failure. There is no additional DG set for the proposed modernization.

Existing unit has 1 X 5 TPH biomass boiler as stand by. There is no additional boiler required for proposed modernization. Dust collector with Stack has been provided for controlling the particulate emissions within the norms. Di- Ammonium Phosphate Plant is provided with cyclones and scrubbers for scrubbing the gaseous emission. The scrubbed liquor is reused within the plant. It is proposed to modernize the cyclones and scrubbers. Continuous online emission monitoring system has been provided.

Around 1080000 MTPA of Gypsum is generated from the existing phosphoric acid intermediate production unit of Greenstar Fertilizers limited. There is no change in the Solid waste generation after the modernization. Gypsum will be sold to cement plants, cement sheet manufacturing units and also as fertilizer.

About 30 KL/Annum of used oil will be generated which will be disposed to authorised recyclers. About 30 MT/Annum of sulphur muck, process acidic residue is generated from existing sulphuric acid plant which will be reused as filler in DAP complex plant. About 3.5 MT/Annum of spent catalyst containing Vanadium Pentoxide is generated from existing sulphuric acid plant which will be sent to TSDF facility. There is no change in the generation quantity after the modernization.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR & EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the Feasibility Report/ DPR report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the Feasibility Report/ DPR report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The Committee has noted that the proposal has been submitted as per para 7 (ii) of the EIA Notification, 2006. The committee deliberated the report on onsite emergency drill conducted by PP on various months. The committee suggested to conduct study on fertility of Soil and comparative study of Micro species present in the soil of area where product is supplied on large scale. The committee also deliberated the certified compliance report and found to be satisfactory. The Committee has also deliberated on the activities/ action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

The EAC has deliberated the proposal and has made 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 Committee after due diligence considering the expansion of the plant through modernization and debottlenecking, has exempted the requirement of ToR/EIA/PH, as per the provisions contained in para 7 (ii) of the EIA Notification, 2006. The Experts Members of the EAC have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). The project proponent shall undertake a study on fertility of soil and comparative study of micro-species in the soil where their product is applied on large scale.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). Total fresh water requirement shall not exceed 2591 m³/day will be met from Tamil Nadu Water supply and Drainage Board/M/s SPIC Ltd. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (vi). 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.
- (vii). As committed, natural gas shall be used as fuel in all the boilers, after commissioning of the pipeline by the oil companies.
- (viii). 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.
- (ix). 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.
- (x). 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.

- (xi). The Project Proponent shall undertake waste minimization measures as below: (a) Metering and control of quantities of active ingredients to minimize waste, (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes, (c) Use of automated filling to minimize spillage, (d) Use of Close Feed system into batch reactors, (e) Venting equipment through vapour recovery system, (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiii). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (xiv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- (xv). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.12

Expansion of Pesticide Technical unit by M/s GSP Crop Science (P) LTD., located at Plot No. 100 to 103, GVMM, GIDC-Odhav, Ahmedabad, GUJARAT- Consideration of Environmental clearance

[IA/GJ/IND3/187720/2020, No. J-11011/44/2002-IA II (I)]

The Project Proponent and the accredited Consultant M/s Aqua-Air Environmental Engineers Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion of Pesticide Technical manufacturing unit from 30 TPM to 330 TPM and formulation unit (2261 TPM) by M/s GSP Crop Science (P) Ltd at Plot No. 100 to 103, GVMM, GIDC Odhav, Ahmedabad, Gujarat.

The list of existing and proposed products are as under:

S. No.	Product	Capacity (TPM)			CAS No.	LD ₅₀ mg/kg
		Existing	Additional	Total		
1	Acephate Technical	30	300	330	30560-19-1	700
Formulation of Pesticide (liquid + Dust)						
2	Acephate 75%	300	-	300	30560-19-1	700
3	Hexaconazole 5%	180	-	180	79983-71-4	2189
4	Ethion 50%	40	-	40	563-12-2	208
5	Sulphin-M	100	-	100	--	--
6	Chloropyriphos (CPP) 20% & 1.5%	63 & 300	-	63 & 300	2921-88-2	151
7	Cypermethrin (CPM) 10% & 25%	18 & 62	-	18 & 62	52315-07-8	150
8	Fenvalerate (FE) 20% & 0.4%	46 & 300	-	46 & 300	51630-58-1	70
9	Methylparathion 2.0%	300	-	300	298-00-0	6
10	Monocrotophos 36%	100	-	100	6923-22-4	21
11	Alpnamethin 10%	18	-	18	--	--
12	Culnaiphos 25% & 1.5%	92 & 300	-	92 & 300	--	--
13	Combination CPP 50% CPM 5%	2	-	2	--	--
14	Propiconazole 25%	20	-	20	60207-90-1	1000
15	Triazophos 20% & 40%	20	-	20	24017-47-8	82
Total		30 (Tech.) + 2261 (Form.)	300 (Tech.)	330 (Tech.)+ 2261 (Form.)		

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The ToR has been issued by Ministry vide letter dated 23rd Jun 2020. Public hearing is exempted as the project site is located in the notified Industrial area. It is informed that there is no litigation pending against the proposal.

Ministry has issued EC earlier vide letter no. J- 11011/44/2002-IA II (I) dated 17th October, 2005 for expansion of Pesticide Technical to M/s. GSP Crop Science (P) Ltd. Certified Compliance Report is applicable as company have EC for existing plant. Company has obtained EC Issued Vide Letter No. J- 11011/44/2002-IA II (I) Dated 17th October, 2005 and Certified EC Compliance Report from MoEFCC, Bhopal vide Dated 02/07/2017.

Existing land area is 11,000 m², no additional land is required for proposed expansion project. Industry developed Greenbelt in an area of 32.73% i.e., 3600 (32.75%) m² out of 11,000 m² area of the project. The estimated project cost is Rs. 8.0 Crores including existing investment of Rs. 5.5 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.0.5 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.4 Crores per annum. Total Employment will be 50 persons as direct & indirect for project. Industry proposes to allocate Rs. 2.5 Lakhs (approx.) in next 1 years towards Corporate Environment Responsibility

There are no National Parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance.

Ambient air quality monitoring was carried out at 8 locations during December 01, 2019 to February 29, 2020 and submitted baseline data indicates that ranges of concentrations of PM10 (88.61 – 64.28 µg/m³), PM2.5 (48.06 – 29.80 µg/m³), SO₂ (28.42 – 14.32 µg/m³) and NO₂ (34.58 – 16.12 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.024 µg/m³, 0.044 µg/m³ and 0.015 µg/m³ with respect to PM10, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total fresh water requirement is 124.6 m³/day and will be met from Gujarat Vepari Mahamandal Sahakari Audyogik Vasahat Limited Water Supply. There is no process waste water generation in existing as well as after proposed expansion. Total 16 KL/day Industrial (existing: 1.8 KL/Day + additional: 14.2 KL/Day = Total after Expansion: 16 KL/Day) effluent shall be generated and shall be treated in Primary effluent treatment Plant and then sent to CETP for further treatment & disposal. 12.5 m³/day Domestic wastewater generated shall be disposed through septic tank & soak pit.

Power requirement for after proposed expansion project will be 600 KVA (Proposed) and (Existing) 550 KVA and will be met from MGVCL. (Existing) 1 Nos. DG set of 325 KVA capacity and (Proposed) 1 Nos. DG set of 625 KVA capacity shall be used as standby during power failure. Stack (height 12 m) will be provided as per CPCB norms. Unit shall have 1 Nos. of 1.5

TPH White coal boiler (Existing), 1 Nos. 1000 Lit/hr LDO Incinerator (Existing), 1 No. of 325 KVA D.G. set (Existing), 1 Nos. of 2.5 TPH White coal boiler (Proposed) & 1 No. of 325 KVA D.G. set (Proposed) set will be installed. Multi cyclone separator & wet scrubber/ bag filter/ESP with a stack of height of 32 m, 30 m, 12 m, 32 m & 12 m will be installed for controlling the Particulate emissions (within statutory limit of 150 mg/Nm³) respectively.

Details of Process emissions generation and its management.

1) Flue Gas Stack

S. No.	Stack Attached To	Fuel Consumption	Stack Height (meter)	APCM	Emission Concentrations
Existing					
1.	Boiler Capacity: 1.5 TPH	White Coal: 4000 Kg/day	32	Bag Filter & Wet scrubber	PM: 150* mg/Nm ³ SO ₂ : 262* mg/Nm ³ NOx: 94* mg/Nm ³
2.	Incinerator Capacity: 1000 Lit/hr	LDO: 100 Lit/hr	30	Wet Scrubber with packing column & MCS	PM: 150* mg/Nm ³ SO ₂ : 262* mg/Nm ³ NOx: 94* mg/Nm ³
3.	D. G. Set - 01 Capacity: 325 KVA (Stand By)	LDO: 52 Lit/hr	12	Adequate Stack Height	PM: 150* mg/Nm ³ SO ₂ : 262* mg/Nm ³ NOx: 94* mg/Nm ³
Proposed					
4.	Boiler Capacity: 2.5 TPH	White Coal: 7500 Kg/day	32	Bag Filter & Wet scrubber	PM: 150* mg/Nm ³ SO ₂ : 262* mg/Nm ³ NOx: 94* mg/Nm ³
5.	D. G. Set - 02 Capacity: 625 KVA (Stand By)	HSD: 50 Lit/hr	12	Adequate Stack Height	NOx: 94* mg/Nm ³

Details of Solid waste/ Hazardous waste generation and its management. Seven Categories of Hazardous/Solid Wastes shall be generated from this Unit.

Used Oil (Total Proposed) @ 10.8 MT/Annum shall be Collected, Stored, Transported and Disposal by selling to registered refiners. Discarded Container (Existing) @ 4.0 MT/Annum & (Total Proposed) @ 24.0 shall be Collection, Storage, Decontamination, Transportation, Disposal by selling to authorized recycler.

ETP waste (Existing) @ 36.0 MT/Annum & (Total Proposed) @ 120 MT/Annum shall be Collected, Stored, Transported and Disposal at TSDF site of NECL Nandesari. Process Waste (Existing) @ 41.588 MT/Annum & (Total Proposed) @ 198.0 MT/Annum shall be Collection,

Storage & Incinerate within the premises / or Disposal at CHWIF / RSPL / Green gene Enviro protection and Infrastructure Pvt. Ltd. / Cement Industry for co-processing. Incineration Ash (Existing) @ 3.0 MT/Annum & (Total Proposed) @ 36.0 MT/Annum shall be Collection, Storage, Transportation, Disposal at TSD of NECL. Ammonium Acetate (Aqueous waste) (Total Proposed) @ 9000 MT/Annum shall be Collection, Storage, Transportation and sold to end user having permission under rule-9. Fly Ash (Total Proposed) @ 207 MT/Annum shall be Collection, Storage, Transportation and sell to Brick Manufacturer.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated certified compliance report of earlier EC condition and the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Treated effluent of 16 cum/day proposed to be discharged to CETP shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). No banned pesticides shall be manufactured.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). Based on the Safety and risk assessment studies conducted, action plan and mitigation measures proposed shall be implemented.
- (ix). 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.

- (x). 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 flame 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.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xii). Total fresh water requirement shall not exceed 124 cum/day proposed to be met from M/s Gujarat Vepari Mahamandal Sahakari Audyogik Vasahat Limited Water Supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvii). A separate Environmental Management Cell (having qualified person 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.

DAY 2: 30th December, 2020 (Wednesday)

Agenda No. 3.13

Expansion in Nirma Chemical Complex at Village - Kalatalav, Taluka & District - Bhavnagar, Gujarat by M/s Nirma Limited – Consideration of Environment & CRZ Clearance

[IA/GJ/IND3/187322/2014, J-11011/369/2014-IA-II(I)]

The project proponent, through email, has informed that the project involves EC & CRZ clearance and recommendations from the State CZMA is yet to be obtained. The EIA/EMP report has been submitted in anticipation of the same before the EAC meeting.

The Committee observed that the EIA/EMP report shall be submitted in totality including the recommendations of the SCZMA and incorporating all the studies. The Consultant shall read all the provisions of the EIA Notification, 2006 and CRZ Notification and afterwards submit the complete application for the appraisal of the project before the EAC.

*After detailed deliberations by the EAC, the proposal was accordingly **returned** in its present form for submitting the complete application for EC & CRZ and other forms & reports as per the provisions of the EIA Notification and CRZ Notification for appraisal of proposal before the EAC.*

Agenda No. 3.14

Pigment Manufacturing @ 230 MT/M located at Plot No. 55, GIDC, Nandesari, Tahsil & District- Vadodara, Gujarat by M/s Sapphire Pigments Industries - Consideration of Environmental Clearance

[IA/GJ/IND3/181096/2018, IA-J-11011/323/2020-IA-II(I)]

The project proponent and the accredited consultant M/s Bhagwati Enviro Care Pvt Ltd, made a presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for manufacturing of Synthetic Organic Chemical (Pigments) at Plot No.:55, GIDC Estate, Nandesari, Taluka & District Vadodara (Gujarat) by M/s Sapphire Pigments Industries.

The ToR for the project has been issued by SEIAA, Gujarat vide letter No. SEIAA/GUJ/TOR/5(f)/106/2019; dated 10th January 2019. Public hearing is exempted as the project site is located in Notified Industrial Area of GIDC Nandesari, Gujarat.

The project/activities are covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general condition (located within 5 km of CPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Deliberations in the EAC:

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent has been undergoing chemical manufacturing in the proposed site after obtaining CTE/CTO from the State PCB. **The Committee was of the view that operational status of the existing unit/compliance status of the CTO conditions shall be submitted through Regional Office of the Ministry for appraisal of the project. The Committee observed that the Form 2 shows activities covered under item 1 (b) 'Onshore and Offshore oil and gas exploration, production and development', however, the present project falls under item 5(f) 'Synthetic organic chemicals industry'. The Committee showed its displeasure on the quality of the data provided by the consultant.**

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following additional information/input, as under:

- (i) Form -2 shall be revised with complete details of the project, providing accurate information.*
- (ii) Project proponent shall revise the complete EIA/EMP Report providing all the requisite information.*
- (iii) Revised layout with detailed greenbelt plan.*
- (iv) Details of existing project, along with copy of CTE/CTO.*
- (v) Operation status of the existing unit/Compliance status of existing CTO conditions forwarded by the State PCB.*
- (vi) Detailed process flow diagram.*
- (vii) The project site is located in the CPA, however, the baseline values are very well within the NAAQ limits. Data shall be revalidated and justification shall be provided for the submitted data values.*
- (viii) Action plan for controlling the fugitive emissions from the unit considering the unit proposed in the CPA.*
- (ix) Commitment for not using coal as fuel, considering the CPA and incremental GLCs.*

The proposal was accordingly **returned** in its present form for submission of revised Report as per provision of the Appendix III of the EIA Notification, 2006.

Agenda No. 3.15

Expansion of chemical manufacturing unit at Survey No. 313, village Mujpur, Taluka Padra, District Vadodara (Gujarat) by M/s Shimmer Chemicals Pvt Ltd-Reconsideration of Environmental Clearance

[IA/GJ/IND2/140871/2007, J-11011/763/2008-IAII(I)]

The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 11th May, 2020. The Committee after detailed deliberations desired for the following additional information and the reply submitted by the PP are as under:

S. No	Information desired by the EAC	Information provided by the PP
(i)	Submit the permission for fresh water withdrawal and submit clarification for operating the existing unit without prior permission for fresh water withdrawal.	NOC for water abstraction from unit's borewell (NOC No: CGWA/NOC/IND/ORIG/2020/9216) is granted and valid from 02/12/2020 to 01/12/2023. For expansion, Unit has made CGWA application for water abstraction of 62.7 KLD. The rain water recharge well is already made in Mujpur village. Copy of NOC and report is provided. The EAC deliberated the same.
(ii)	Action Taken Report on non-compliance points in the existing EC conditions which needs to be forwarded by the Regional Office of the Ministry.	Action taken report of partly complied points from regional office of MOEF&CC, Bhopal is received on dated 21-09-2020 and is provided. The EAC deliberated the same.
(iii)	Submit the copy of public hearing report forwarded by the Head office of Gujarat Pollution Control Board as the said report uploaded on the PARIVESH portal is not opening. Also issues raised during public hearing, response by the project proponent, action plan with	Member Secretary, GPCB has forwarded public hearing proceedings along with supporting documents to Director (Industry-II), MoEF&CC. Copy of GPCB letter for public hearing proceeding is provided. Public hearing proceedings are uploaded on Parivesh portal. Issues raised during the public hearing along with budgetary provision & time bound action plan is submitted. The EAC deliberated the same.

	budgetary allocation and its time lines needs to be submitted.													
(iv)	The Committee observed that District Vadodara comes under Critically Polluted area, however PP mentioned that this is away from CPA. In this context, the Committee suggested that PP shall submit the copy of letter either from CPCB or SPCB about the location of project in Critically Polluted area or not as there are different provisions of appraisal of projects which comes under CPA.	<p>The project location does not fall in Critically Polluted Area (CPA) or Severely Polluted Area (SPA) as per the MoEF&CC Office Memorandum dated 31.10.2019. The EAC deliberated the same.</p> <p>Gujarat Pollution Control Board (GPCB) has issued Office Order for mechanism of environmental management of CPAs/SPAs including Map of respective areas obtained from BISAG. Only Nandesari GIDC & PCC area of Vadodara District falls under CEPI.</p> <p>The unit is approx. 19 km away from Nandesari GIDC. Google image showing distance from CEPI to project site is given. The industrial area does not fall in CPA area or not in close vicinity of boundary of CEPI areas.</p>												
(v)	Detailed effluent analysis report needs to be submitted.	<p>Total Proposed industrial wastewater generation is 6.4 KLD; details are shown in table below:</p> <table border="1"> <thead> <tr> <th>Effluent</th> <th>Generation KLD</th> </tr> </thead> <tbody> <tr> <td>Boiler blow-down</td> <td>2.5</td> </tr> <tr> <td>Cooling tower blow-down</td> <td>1.0</td> </tr> <tr> <td>RO reject</td> <td>2.67</td> </tr> <tr> <td>Process Water</td> <td>0.23</td> </tr> <tr> <td>Total</td> <td>6.4</td> </tr> </tbody> </table> <p>Except 0.23 KLD process effluent, 6.17 KLD effluent has no chemical composition characteristics, hence it will directly go to the storage tank for their usage in HCl scrubbing to form 30% HCl solution and Cl₂ scrubbing to form 10% NaOCl solution.</p> <p><u>FOR PROCESS EFFLUENT:</u></p> <p>Proposed process wastewater generation is 0.23 KLD, which will be distilled and this distilled process water will go to the scrubbing tank for their usage in HCl scrubbing to form 30% HCl solution and Cl₂ scrubbing to form 10% NaOCl solution.</p>	Effluent	Generation KLD	Boiler blow-down	2.5	Cooling tower blow-down	1.0	RO reject	2.67	Process Water	0.23	Total	6.4
Effluent	Generation KLD													
Boiler blow-down	2.5													
Cooling tower blow-down	1.0													
RO reject	2.67													
Process Water	0.23													
Total	6.4													

		Stream wise effluent analysis reports include Boiler blow-down, Cooling tower blow-down, RO reject and process water (before and after distillation) are submitted.
(vi)	Status of TSDF membership needs to be submitted.	Unit has lifetime membership certificate for hazardous waste disposal. Membership Certificate Copy of M/S. NECL, Nandesari is submitted.

The Project Proponent and their Consultant M/s Aryan Greens, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Increase in production capacity & addition of new products within existing premises from 210 TPM to 1000 TPM by M/s Shimmer Chemicals Pvt Ltd at Survey No. 313, Village Mujpur, Taluka Padra, Vadodara, Gujarat.

The details of products and capacity as under:

S. No.	Name of Products	Existing	Proposed	Total
		Capacity (TPM)		
1.	Benzyl Alcohol	6	19	25
2.	Ortho/Para Chloro Benzyl Alcohol (2-chloro Benzyl Alcohol)	--	25	25
3.	Benzylidene Acetone	20	30	50
4.	Ortho Chloro Benzyl Chloride	40	235 (Max)	275 (Either individual or total of 7 products)
5.	Benzyl Chloride	15	260 (Max)	
6.	Para Chloro Benzyl Chloride (4-Chloro Benzyl Chloride)	--	275 (Max)	
7.	2-Methyl Benzyl Chloride (2-chloro Ortho xylene)	--		
8.	Dichloro Ortho Xylene (2,2-Dichloro Ortho Xylene)	--		
9.	2,4-Dichloro Benzyl Chloride	--		
10.	Meta-Chloro Benzyl Chloride	--		
11.	Ortho Chloro Benzaldehyde	4	296 (Max)	300 (Either individual or total of 4 products)
12.	Para Chloro Benzaldehyde	--	300 (Max)	
13.	Benzaldehyde	88	212 (Max)	
14.	2,4-Dichloro Benzaldehyde	--	300 (Max)	
15.	N-Chloro Pentane	37	288 (Max)	325 (Either individual or
16.	N-Butyl Chloride			

17.	1,6-Dichloro Hexane	(Either individual or total of 3 products)		total of 4 products)
18.	N-Hexyl Chloride	--	325 (Max)	
Total		210	790 (Max)	1000

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

The ToR has been issued by Ministry vide letter No. J-11011/763/2008-IAII(I); dated 13th September, 2018. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 31/12/2019, which was presided over by the Additional District Magistrate. The main issues raised during the public hearing are related to Rainwater Harvesting, Enterprise Social Commitment (ESC), Employment, Air Emission and effective control measures. It was informed that there is no litigation pending against the proposal.

The Ministry had issued EC earlier vide letter no. J-11011/763/2008-IA.II(I); dated 30/01/2009 to the existing project for production of 210.0 MT/month in favour of M/s. Shimmer Chemicals Pvt. Ltd. Certified compliance report submitted by RO, MoEF&CC. By File No: 5-111/2009(ENV)/020 on 06/01/2020. Out of 35 conditions, it may be seen that 24 are complied, 8 are partly complied, 2 are agreed to comply and 1 is noted. There is no court matter pending against the project.

Existing land area is 16200.0 m²; proposed expansion is to be carried out at the existing premises only. No additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 5347.49 m² out of total area of the project. The estimated project cost is Rs. 17.3 crores including existing investment of Rs. 10.0 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 42 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 8.4 lakhs per annum. Total Employment will be 20 persons as direct & 30 persons indirect after expansion. Industry proposes to allocate Rs. 18.25 lakhs towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Mahisagar River is flowing at a distance of 1.03 km in NNW direction.

Ambient air quality monitoring was carried out at 9 locations during 3rd December, 2018 to 28th February, 2019 and the baseline data indicates the ranges of concentrations as: PM10 (46.8 – 117.3 µg/m³), PM2.5 (15.1 – 66.7 µg/m³), SO₂ (5.3 - 38.6 µg/m³) and NO₂ (6.4 – 47.3 µg/m³).

AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be $2.35\mu\text{g}/\text{m}^3$, $3.37\mu\text{g}/\text{m}^3$ and $1.4\mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_x and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards except PM_{10} .

Total water requirement is $79.1\text{ m}^3/\text{day}$ of which fresh water requirement of $62.7\text{ m}^3/\text{day}$ will be met from existing bore-well. Total industrial wastewater generation will be 6.4 KLD , which will be used in HCl scrubbing to form 30% HCl solution and Cl_2 scrubbing to form 10% NaOCl solution. Unit will remain Zero Liquid Discharge, after proposed expansion.

Power requirement after expansion will be 500 KVA including existing 250 KVA and will be met from Madhya Gujarat Vij Company Ltd. (MGVCL). Existing unit has two DG sets of 175 KVA and 75 KVA capacities, there will be no additional DG Set required as a part of the expansion.

Existing unit has 02 TPH Briquette/Agro-waste fired boiler with 02 TPH standby boiler. After proposed expansion the 02 TPH IBR Boiler will be replaced by 03 TPH, No Additionally boiler will be installed. Multi cyclone separator and bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of $115\text{ mg}/\text{Nm}^3$ for the proposed boilers.

There will be no requirement of new additional process gas stack after proposed expansion. The Capacity of Benzyl Chloride reactor and Benzaldehyde reactor will increase to 10 Nos. respectively. Company has installed an online monitoring system for HCl and Cl_2 gas. Two stage water scrubber & Single stage Alkali Scrubber (2 Nos.) will be used as APCM for Benzyl Chloride Reactors (10 Nos.) and Three stage water scrubber & Single stage Alkali Scrubber will be used as APCM for Benzaldehyde Reactors (10 Nos.).

Entire quantity of hazardous waste will be handled and disposed as per Hazardous & Other waste (Management and Transboundary Movement) Rules, 2016. Distillation residue, spent catalyst will be sent for incineration at M/s. NECL, Nandesari. Whereas discarded containers/Barrels/Liners will be sent to GPCB authorized dealer. Used or spent oil will be reuse in plant & machinery as lubricant or sell it to authorized re-refiners/ recycler. Spent HCl (30% Solution), Sodium Hypochlorite (10% Solution), Sodium Benzoate (10% Solution) collection, Storage, Treatment, Transportation and Disposal and selling to actual re-users having valid authorization from GPCB & permission of Central Pollution Control Board, New Delhi. Fly Ash will be Sale to brick manufacturers. Distillation will be done of the Process waste and the recovered materials will be used as Raw materials in products.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project

Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards except PM10. The Committee deliberated the action plan on mitigation measures to minimize the PM10 load. In this regard the Committee has suggested the PP to initiate greenbelt development for abatement of pollution. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area and public hearing issues. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The Committee has noted that the Industry proposed Rs. 1.50 lakhs towards Conservation Plan for Schedule-I species. The additional requisite information submitted by the project proponent and compliance status of the existing EC conditions found to be satisfactory. The Committee mentioned that the consultant was allowed to present the proposal as it was a reconsideration case, and insisted that the consultant shall get accreditation from QCI/NABET.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). The Unit shall effectively implement the action plan for reduction of incremental GLC of PM10 due to the proposed project. The implementation status shall be submitted to the Regional Office of the MoEFCC/SPCB in the compliance status of project.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). 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.
- (vi). 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.
- (vii). 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.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (ix). 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 flame 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.

- (x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi). Total fresh water requirement shall not exceed 62.7 cum/day proposed to be met from bore well. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA, and renewed from time to time.
- (xii). 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.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.
- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xv). As proposed, Industry shall allocate Rs. 1.5 lakhs towards Conservation Plan for Schedule-I species in consultation with State Forest/Wildlife Department.
- (xvi). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.

- (xvii). A separate Environmental Management Cell (having qualified person 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.

Reconsideration of Environmental Clearance

Agenda No. 3.16

Expansion and Change in Product Mix for manufacture of Synthetic Organic Chemicals Drugs and Byproducts by M/s Sanskar Chemicals and Drugs Private Limited located at S.F. No. 457/3A, 457/3C, 457/4A, 457/4C, 457/4C (Part) Ammoor Village, 12/5 (Part) Chettithangal Village, Taluk Walajah, District Vellore, Tamil Nadu -Reconsideration of Environment Clearance [IA/TN/IND2/155475/2018, IA-J-11011/361/2018-IA-II(I)]

The Project Proponent and the accredited Consultants M/s Hubert Enviro Care System (P) Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Expansion and Change in Product Mix located at S.F. No. 457/3A, 457/3C, 457/4A, 457/4C, 457/4C (Part) Ammoor Village, 12/5 (Part) Chettithangal Village, Walajah Taluk, Vellore District and Tamil Nadu State by M/s. Sanskar Chemicals and Drugs Pvt Ltd.

The details of products and capacity as under:

S. No	Products	Quantity (MT/Month)		Total quantity after expansion
		Existing Products*	Proposed Products	
1.	Poly Allamine Hydrochloride	20	Retained	20
2.	Isopropanol Hydrochloride	40	Retained	40
3.	Non ferric alum	90	Dropped	0
4.	Basic chromium Sulphate	90	Dropped	0
5.	Spent caustic lye solution	10	Dropped	0
6.	Linagliptin	-	0.15	0.15
7.	Vildagliptin	-	1.5	1.5
8.	Tritylolmesartanmedoximal	-	2	2
9.	Allyl Isopropyl acetyl urea	-	5	5
10.	Diacerine	-	0.2	0.2
11.	Sitagliptin	-	1	1
12.	Lexoprofen	-	2	2
13.	Isopropyl bromide	-	10	10

14.	Allylbromide	-	6	6
15.	Hydrogen Bromide	-	25	25
	Total	250	52.85	112.85
	By products			
1	Spent Sulphuric acid	81	Retained	81
2	Gypsum	60	dropped	-
	Total	141	-	81

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

MoEF&CC issued Terms of Reference (ToR) for the proposed project on 18.12.2018. Public Hearing for the proposed project has been conducted by the state pollution control board on 02.01.2020. The main issues raised during the public hearing are related to Air, water pollution and improper activities industries in Ranipet area. The proponent has allocated 16 Lakhs as a budget for PH commitments.

It was informed that the company was originally under the name of J.R.P Intermediate Private Limited, incorporated on 2nd February 2000. Later it was name changed to M/s. Sanskar Chemicals and Drugs Private Limited. There were no operations from 2000-2009.

In August 2010, proponent started manufacturing the following Inorganic chemicals:

1. Potassium Nitrate,
2. Ammonium Chloride and
3. Calcium chloride.

In 2013, Sanskar applied for CTE (Expansion) vide Proceeding no: DEE/TNPCB/VLR/F.VLR0349/RS/A/2013 dated: 01.04.2013 by dropping the existing 3 products and addition of 5 New products such as:

1. Isopropanol hydrochloride,
2. Poly Allyl Amine Hydrochloride,
3. Non ferric alum,
4. Basic Chromium Sulphate and
5. Spent caustic lye solution.

Subsequently, CTO received vide proceeding no: F.VLR0349/RS/TNPCB/DEE/VLR/A/2013 dated 19.7.2013 (for Air) & F.VLR0349/RS/TNPCB/DEE/VLR/W/2013 dated 19.07.2013 (for water) and started manufacturing of above products.

Subsequently in 2018, TNPCB was approached for addition of new products, and TNPCB directed to obtain EC. In 2013 without knowledge and proper direction proponent have violated by not taking EC for the synthetic organic chemicals and agree for action to be taken on proponent under the E(P) Act, 1986, and as per the rules/ guidelines framed under the Ministry's notification S.O.04 (E) dated 14th March 2017. Since the violation was done without proponent's knowledge and they will comply the directions issued to the proponent.

Considering the violation nature of the project, remediation plan and natural and community resource augmentation plan has been prepared for an amount of Rs 1983750.

Deliberations in the EAC

The Member Secretary informed the Committee that the proposal was earlier considered by the EAC (Industry-2) in its meeting held during 20-22 October, 2020. The EAC during deliberations noted that the project had been involved in the production of organic compounds without prior EC from the Ministry since 2010. The Committee has been informed that there is no window available now for consideration of such proposals. The Committee observed that the PP has been operating the unit with valid CTO from the State PCB and as such, this type of violation shall happen due to lack of knowledge and also due to absence of proper directions from the SPCBs. The Committee was of the view that such proposals coming for EC shall be considered on merit on case to case basis, after taking proper action under the E(P) Act, 1986, and as per the rules/guidelines framed under the Ministry's Notification S.O.804 (E) dated 14th March, 2017. The Committee, at the first instance opined that the matter may be examined by the Ministry and the proposal shall be considered by the EAC based on the decisions taken.

The Member Secretary has further informed the Committee that the Competent Authority in the Ministry, in a related file (of M/s Tata Steel Limited, Odisha , F. No. J-11011/7/2006-IA-II(I)), has observed and directed that the case is beyond the applicability of S.O. 804 (E) dated 14/03/2017 and the case should be considered by EAC as normal project. Further, it was directed to adopt the following principle in all cases where violation is suspected or alleged:-

- (i). Send the matter to the Sector EAC for consideration of the case on merit.*
- (ii). Take action against the alleged violation as per law.*
- (iii). Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.*
- (iv). The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established by the court or the competent authority, the punishment/penalty as per law would be imposed.*

In pursuance to the aforesaid directions, the proposal was placed before the EAC for consideration. The Committee noted that the proposal has been considered only on merit, and after detailed deliberations has recommended to initiate following actions considering the violation of the EIA Notification, 2006, in addition to additional information/inputs from the project proponent:

- (i). *Direction to be issued under section 5 of the Environment (Protection) Act, 1986 to stop the violating activities till the EC is obtained.*
- (ii). *Letter issued to the State Government with a request to initiate legal action against PP under section 15 read with section 19 of the Environment (Protection) Act, 1986.*
- (iii). *Revised Form 2 and EIA/EMP report with complete details and documents.*
- (iv). *Revised remediation plan and natural and community resource augmentation plan.*
- (v). *Action plan based on public hearing issues and details of activities.*
- (vi). *Action plan for compliance of CTO conditions.*
- (vii). *Plan for Installation of Double acoustic membrane for noise pollution control.*
- (viii). *Permission for fresh water/Copy of license of private tanker through which fresh Water requirement is proposed to be met.*
- (ix). *Mitigation measures and action plan for improving the air quality.*

The proposal was accordingly **returned** in its present form for revision of application on Parivesh portal.

Agenda No. 3.17

Expansion of bulk drug unit by M/s Aurobindo Pharma Limited (Unit-XI) located at village Pydibeemavaram, Tehsil Ranasthalam, District Srikakulam, Andhra Pradesh - Reconsideration of Environment Clearance.

[IA/AP/IND2/78618/1900, J-11011/53/2005-IA-II(I)]

The proposal was earlier placed before the EAC in its meeting held during 8-9 April, 2019 wherein EAC recommended the proposal and asked to obtain Necessary permission/recommendation from the State Coastal Zone Management Authority for discharge of 2015 cum/day to the marine outfall system, as applicable and a meeting was conducted on 7th October, 2020 in the Ministry, wherein additional details were sought. Information desired and response submitted by the project proponent is as under:

S. No.	Additional information/inputs	Reply of PP	Observation of EAC
1.	CRZ map in 1:4000 scale, one of the statutory document as per CRZ Notification, 2011	CRZ Report and Maps prepared by CSIR-NIO, Goa was submitted as advised.	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.
2.	Compliance Report of the CRZ clearance dated 17.06.2015 and compliance status of the ECs, from the Regional office of the Ministry after conducting site visit.	Compliance Report issued by APPCB of the CRZ Clearance (17.06.2015) and EC of Hyacinths Pharma Pvt. Ltd., submitted. Compliance Report of the EC of Aurobindo Pharma Limited submitted at the time of processing of our application for grant of Environmental Clearance for Expansion to MoEF.	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.
3.	Details of linkages between M/s Aurobindo Pharma Limited and M/s Hyacinth Pharma Pvt Ltd vis-à-vis the EC and CRZ clearances granted and utilization of facilities.	<p>Aurobindo Pharma Limited, Unit – XI and Hyacinths Pharma Pvt Ltd are two independent API/API Intermediate manufacturing units.</p> <p>Hyacinths Pharma Pvt Ltd is acquired by Aurobindo group and a 100% subsidiary of Aurobindo Pharma Limited.</p> <p>*There is no specific CRZ clearance for Aurobindo Pharma Limited, Unit – XI. ECs were accorded based on NOC issued by APCZMA.</p> <p>There are no linkages between the two units in any way including utilization of facilities As per existing ECs of Aurobindo Pharma Limited, Unit</p>	EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.

		<p>– XI and CRZ Clearance of Hyacinths Pharma Pvt. Ltd. Hyacinths Pharma Pvt. Ltd., is not yet operational</p> <p>There is no manufacturing activity at the site.</p> <p>The project has completed only laying of marine pipeline. Civil work at the operations site is still progressing</p>	
4.	<p>Details of total effluent discharge to marine environment by M/s Aurobindo Pharma Limited and permission for the same on CRZ angle along with copy of CTO from SPCB.</p>	<p>Treated wastewater in the range of 460-480 KL/day is being discharged to marine outfall. On-line flow meter readings of wastewater discharge, as being regulated and permitted by APPCB, for Nov., 2020 submitted for reference</p> <p>As per ECs, MoEF&CC permitted discharge of 241 m³/day and 555 m³/day of treated wastewater disposal respectively.</p> <p>As per CTO (CFO) by APPCB, permission accorded for marine disposal of 778.71 KLD.</p>	<p>EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.</p>
5.	<p>Present status of the M/s Hyacinth Pharma Pvt Ltd pipeline and details of effluent discharge. This issues with the approval of the Competent Authority in the Ministry.</p>	<p>Laying of pipeline of M/s Hyacinth Pharma Pvt Ltd is completed. Construction of manufacturing facilities at the project site is in progress.</p> <p>There is no manufacturing activity at site at present.</p>	<p>EAC deliberated the issue and found the reply to be addressing the concerns of the Committee.</p>

The Project Proponent and the accredited Consultant M/s Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

The Proposal is for Environmental and CRZ clearance (EC&CRZ) to the project for expansion of bulk drugs and Intermediates manufacturing unit from 583.31 TPM to 1518.3 TPM and captive power plant of 8.85 MW in an area of 165 acres located at Sy. Nos. 52, 53, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77 and 78 of Pydibhimavaram Village, 2, 4, 5,

6, 7, 8, 9 & 11 of Chittivalasa Village, Ranasthalam Mandal, Srikakulam District, Andhra Pradesh by M/s. Aurobindo Pharma Limited, Unit XI.

The details of products and capacity are as under:

Existing Products List

S. No.	Name of Product	Capacity (TPM)
Group - A		
1	6 APA	20
2	Ampicillin Dane Salt	15
3	Amoxicillin Dane Salt	15
4	Ampilillin Trihydrate	10
5	Amoxicillin Trihydrate	10
6	Cephalexin	15
7	Cloxacillin	10
8	Sulbuctum Sodium	2
9	Sutamicillin Tosylate	2
10	7 ACA	10
11	CMIC Chloride	30
12	DICMIC Chloride	5
13	Ciprofloxacin	25
14	Enrofloxacin	5
15	Ethambutal HCl	10
16	Pyrazinamide	12
17	Cefachlor	0.5
	Total Group A: Worst Case 6 Products on Campaign Basis	120
Group - B		
1	Ampicillin	100
2	Amoxicillin	150
3	Cephalexin	60
4	Cloxacillin Derivatives	35
5	Lamovudine	8
6	Nevirapine	4
7	Cefazolin sodium	6
8	Stavudine	3.3
9	Effavarencz	5
10	Abcavir	1.5
11	Retanovir	1.2
12	Lopinavir	1

13	Zidovudine	20
	Total Group B: Worst Case 5 Products on Campaign Basis	365
Group - C		
1	Cefradine	8
2	Cefadroxil	20
3	Cefixime	10
4	Cefdoxime Proxetil	10
5	Cefrozil	2
6	Cefidininir	2
7	Atomoxitin HCl	0.08
8	Carisprodolol	6
9	Clarithromycin Carbopol	0.13
10	Clindamycin Palmiate HCl	0.04
11	Duloxetine HCl	0.5
12	Esomeprazole Magnesium	0.83
13	Felodipine	0.04
14	Galanthamine HBr	0.04
15	Ibandranote Sodium	0.4
16	Lamotrigine	3
17	Levetiracitam	6
18	Levofloxacin	4
19	Naproxen Sodium	7.4
20	Neteglinide	0.17
21	Omeprazole	0.92
22	Omeprazole Magnesium	0.13
23	Pioglitazone HCl	0.25
24	Quetiapine Fumerate	1.83
25	Raloxifine HCl	0.21
26	Repaglinide	0.02
27	Risedronate Sodium	0.04
28	Rizatriptan Benzoate	0.02
29	Rosuvastatin Calcium	0.17
30	Tramadol HCl	1.42
31	Valacyclovir HCl	2.5
32	Zipresidone HCl	0.17
33	Tenofovir	7
34	Emtricitabine Salicylate	3
	Total Group C : (34 Products)	98.31
	Grand Total (Group A + Group B + Group C)	583.31

Manufacturing Capacity– After Expansion

S. No.	Name of Product	Capacity (TPM)
Group A		
Regular Products		
1	Abcavir	3.5
2	Alendronate Sodium	3
3	Atomoxitin HCl	2.2
4	Carisprodolol	6
5	Cefrozil	2
6	Celecoxib	7
7	Cilastatin Na	1
8	Ciprofloxacin	25
9	Clopidogrel Bisulfate	6
10	Colesavelan HCl	1
11	Darunavir propylene glycolate	1.5
12	Dextromethorpan	1
13	Didanosine	1
14	Divalproex Sodium	7
15	Dolutegravir sodium	15
16	Duloxetine HCl	15
17	Effavarenc	5
18	Emtricitabine Salicylate	3.5
19	Enrofloxacin	5
20	Esmoprazole Sodium	1
21	Esomeprazole Magnesium	2.5
22	Ethambutal HCl	10
23	Gabapentin Hydrochloride	50
24	Lacosamide	2.4
25	Lamotrigine	6
26	Lamovudine	35
27	Levetiracetam	40
28	Levofloxacin	20
29	Lopinavir	4
30	Metformin Hydrochloride	100
31	Methenamine Hippurate	7
32	Methyl Iodide	1
33	Naftopidil	1
34	Naproxen Sodium	10
35	Nevirapine	10

36	Olmesartan Medoxomil	1.5
37	Omeprazole	12
38	Pioglitazone HCl	1
39	Pregablin	6
40	Pyrazinamide	12
41	Quetiapine Fumerate	12
42	Raloxifine HCl	5
43	Ranolazine	1.3
44	Retanovir	1.2
45	Rosuvastatin Calcium	2
46	Sertraline Hydrochloride	30
47	Sevelamer Hydrochloride/Carbonate	15
48	Stavudine	1.4
49	Tenofovir	40
50	Tramadol HCl	5
51	Valacyclovir HCl	35
52	Valganocyclovir	1
53	Valsartan	15
54	Voriconazole	1
55	Zidovudine	20
	Total - I	628
Campaign Products		
1	Acetoxy compound	0.3
2	Apixaban	0.25
3	Atovaquone	0.25
4	Azilsartan Kamedoxomil	0.16
5	Bosentan	0.25
6	Canaglifozin	0.25
7	Cefachlor	0.5
8	Cinacelcet-Hcl	0.3
9	Clarithromycin Carbopol	0.13
10	Clindamycin Palmiate HCl	0.75
11	Clobazam	0.25
12	Cobicistat	0.25
13	Dabigatran Etxilate Mesylate	0.63
14	Dalfampyridine	0.5
15	Darifenacin	0.1
16	Deferasirox	0.25
17	Desuen Lafaxine Succinate	0.25
18	Dexlansoprazole Anhydrous	0.25
19	Dimethyl Fumarate	0.25

20	Dronedarone Hydrochloride	0.5
21	Elvitegravir	0.25
22	Ezitimibe	0.3
23	Felodipine	0.04
24	Fudosteine	0.8
25	Galanthamine HBr	0.4
26	Ganciclovir	0.4
27	Hydralizin HCl	0.25
28	Ibandranote Sodium	0.04
29	Iron sucrose	0.34
30	Ledipasvir	0.25
31	Linagliptin	0.3
32	Lorcaserin Hydrochloride	0.1
33	Lurasidone Hydrochloride	0.4
34	Methohexital	0.5
35	Mirabegron	0.1
36	Montelukast	0.5
37	Nebivolol hcl	0.25
38	Neteglinide	0.39
39	Omeprazole Magnesium	0.5
40	Paliperidone	0.25
41	Penicillamine	0.25
42	Pitavastatin Ca	0.2
43	Prasugrel HCl	0.1
44	R&D products	0.5
45	Raltegravir Potassium	0.25
46	Repaglinide	0.25
47	Risedronate Sodium	0.8
48	Ritanovir	0.5
49	Rivaroxaban	0.1
50	Rizatriptan Benzoate	0.3
51	Roflumilast	0.25
52	Saxagliptan	0.05
53	Sildenafil Citrate	0.7
54	Silodosin	0.25
55	Sitagliptan	0.8
56	Sodium Ferric Gluconate	0.25
57	Sofosbuvir	0.25
58	Solifenacin	0.25
59	Teriflunamide	0.25
60	Zipresidone HCl	0.7

61	Zolimitriptan	0.1
	Total - II - Worst Case 20 Products on Campaign Basis	11.11
	Total (I+II) - Group A	639.1
Group B		
1	7-AVNA	2
2	Amoxycillin	400
3	Amoxycillin Dane Salt	100
4	Amoxycillin Trihydrate	10
5	Ampicillin	100
6	Ampicillin Dane Salt	100
7	Ampilillin Trihydrate	10
8	Bacampicillin	0.5
9	Cefdoxime Proxetil	10
10	Cefidinin	2
11	Cefixime	15
12	Cephalexin	15
13	Cephalexin(Modified Route)	60
14	Cloxacillin	10
15	Cloxacillin Derivatives	35
16	DBDO (6-6- Dibromopencillanic Acid 1, 1-Dioxide)	3.7
17	Flucloxacillin Mg	0.5
18	Sutamicillin Tosylate	2
19	Tazobactam	3.5
	Total Group B	879.20
	Grand Total (Group A + Group B)	1518.3
	Captive Power Plant	8.85 MW

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

The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 22nd meeting held on 17th-18th April, 2017 and recommended Standard Terms of References (TORs) for the Project. The TOR was issued by Ministry vide letter no. F.No. J-11011/153/2017-IA II (I); dated 31.05.2017. Public Hearing for the proposed project has been conducted by the Andhra Pradesh Pollution Control Board on 28.03.2018 which was presided over by District Collector and Magistrate. The main issues raised during the public hearing are related to employment, pollution control measures and village development.

The Ministry had issued EC earlier vide letter dated 23.05.2002 and on 21.06.2005 to the Expansion of Bulk Drugs unit by M/s Aurobindo Pharma Limited (Unit-XI) at Village Pydibhimavaram Tehsil, Ranasthalam District Srikakulam in Andhra Pradesh. The certified compliance report on the existing EC conditions has been forwarded by the Ministry's Regional Office at Chennai vide letter no. EP /12.1/324/AP dated 18.07.2018.

The project proponent obtained necessary recommendations from the Andhra Pradesh State Coastal Zone Management Authority (APCZMA) vide letter dated 20th May, 2020, for discharging of additional treated effluents into the sea through existing pipelines.

Existing land area of 165 acres will be used for proposed expansion. Industry has already developed Greenbelt in an area of 33.33% i.e., 55 acres out of 165 acres of area of the project site.

The estimated project cost for proposed expansion is Rs.250 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.32.77 crores and the Recurring cost (operation and maintenance) will be about Rs.8.84 crores Per annum. Total Employment will be 600 persons as direct and 120 persons indirect after expansion. Industry proposes to allocate Rs.6.25 crores towards Corporate Environmental Responsibility

There are No National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km distance. River/water body Kandivalasa gedda a seasonal stream is flowing from northwest to southeast direction at a distance of 0.2 km in southwest direction to the site. Bay of Bengal is at a distance of 7.2 km in southeast direction. There is one reserve forest within the impact area; Kumili RF is at a distance of 2.1 km in northwest direction.

Ambient air quality monitoring was carried out at eight locations during March 2018 to May 2018 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (35-56µg/m³), PM_{2.5} (14-24µg/m³), SO₂ (9-15µg/m³) and NO₂ (9-14µg/m³) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.71 µg/m³, 14.57 µg/m³, and 16.52 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The total fresh water requirement is 4043 KLD. Fresh water requirement shall be met from ground water. The unit obtained permission for withdrawal of ground water from State Ground water department. Total effluent of 2015 m³/day will be treated stream wise in effluent treatment plant consist of stripper, multiple effect evaporator (MEE), Agitated thin film dryer (ATFD), biological treatment plant, reverse osmosis (RO) plant, Membrane Bio Reactor (MBR), Guard ponds. The effluents are sent to marine discharge after treatment after achieving the disposal standards. Domestic wastewater of 305 KLD is sent to sewage treatment plant and treated

wastewater is reused for greenbelt development.

Power requirement after expansion will be 16630 kVA including existing 1475 kVA and will be met from AP Transco/captive power plant. Existing unit has 3no.s DG sets of capacity 1 x 1000 kVA, 1 x 350 kVA and 1 x 125 kVA will be dismantled after proposed expansion. 6 x 1500 kVA, 5 x 1010 kVA, 2 x 1000 kVA, 1 x 380 kVA and 1 x 200 kVA DG sets are proposed as standby during load shutdown. Stack (height 12 m for 6 x 1500 kVA; 8m for 5 x 1010 kVA; 8m for 2 x 1000 kVA; 5m for 1 x 380 kVA and 4m for 1 x 200 kVA) will be provided as per CPCB norms to the proposed DG sets which will be used as standby during power failure.

Existing unit has 1 x 35 TPH, 1 x 25 TPH, 1 x 20 TPH coal fired boilers and 1 x 6 TPH oil fired boiler (oil fired boiler will be kept as standby after expansion). Additionally, 1 x 35 TPH coal fired boiler will be installed. Electrostatic precipitator (ESP) with a stack height of 47 m will be installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) for proposed boiler.

Details of Process emissions generation and its management: The process emissions contain ammonia, carbon dioxide, hydrogen, nitrogen, oxygen, hydrogen chloride, and sulfur dioxide. Ammonia, hydrogen chloride and sulphur dioxide are sent to scrubber in series. The resultant solutions after scrubbing i.e., sodium chloride from hydrogen chloride, ammonium chloride from ammonia, sodium sulphate from sulfur dioxide scrubbing are sent to ETP. Carbon dioxide, nitrogen and oxygen are let out into atmosphere following a standard operating procedure, while hydrogen gas is let out into atmosphere through a water column.

Details of Solid waste & Hazardous waste generation and its management: Solid wastes are generated from process, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations generate process residue and solvent recycling operation by distillation generates solvent residue and spent mixed solvents. The utilities i.e., coal fired boilers generate ash while DG sets generate waste oil and used batteries. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration based on acceptability. If these wastes are not suitable for co-incineration, the same is sent to TSDF facility. The evaporation salts and ETP sludge are sent to TSDF. Waste oil and used batteries from the DG sets are sent to authorized recyclers.

The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project

Proponent in desired form along with the report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental & CRZ Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report and the Marine EIA report is satisfactory for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The committee deliberated the CRZ clearance and recommended the same. The committee deliberated the action plan for the reduction of particulate matter in the area. The committee recommended to prepare action plan for plantation and budget allocation for issue raised during the PH and green belt development. Based on the deliberations in the EAC, PP has submitted additional information. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

The environmental & CRZ clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and the CRZ Notification, 2011 and its 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 project proponent 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.

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

- (i). All the recommendations and conditions specified by the Andhra Pradesh Coastal Zone Management Authority (APCZMA) vide letter no. 109/CRZ/IND/2018/24 dated 20th May, 2020, shall be complied with.
- (ii). The treated effluent of 2015 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge into deep sea.
- (iii). The project proponent shall undertake detailed study on the impact on marine water quality, flora and fauna due to the discharge of the treated effluents. The outlet quality as

well as the sea water near the outfall shall be monitored regularly. If the parameters are found significant in the future, necessary remediation measures shall be taken. A report in this regard shall be submitted to the Regional Office, MoEFCC along with six monthly monitoring report.

- (iv). Construction activity/maintenance of the pipeline shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction or reconstruction works shall be carried out in the No Development Zone.
- (v). 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 and Marine EIA report in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (vi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (vii). 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.
- (viii). 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.
- (ix). 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.
- (x). 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.
- (xi). 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 flame 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.
- (xii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xiii). Total fresh water requirement shall not exceed 4043 cum/day proposed to be met from bore well. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA, and renewed from time to time.
- (xiv). 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.
- (xv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.
- (xvi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xvii). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.
- (xviii). A separate Environmental Management Cell (having qualified person 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.

Amendment in Environmental Clearance

Agenda No. 3.18

Modernization of bulk drugs and bulk drug intermediates manufacturing unit by reducing the capacity from 5000 kg/Month to 1697.32 kg/Month at Block No.252-253, Village Dhobikuwa, Taluka Padra, District Vadodara (Gujarat) by M/s Apicore Pharmaceuticals Pvt. Ltd.- Amendment in Environmental Clearance

[IA/GJ/IND3/186912/2020, J-11011/454/2007-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 18/06/2020 to the project for Modernization of bulk drugs and bulk drug intermediates manufacturing unit by reducing the capacity from 5000 Kg/Month to 1697.32 Kg/Month located at Block No. 252-253, Village: Dhobikuwa, Taluka: Padra, District: Vadodara (Gujarat) in favor of M/s Apicore Pharmaceuticals Pvt. Ltd.

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

S. No.	Para of EC Issued by MoEF&CC	Details as per EC	To be Revised / Read as	Justification / Reason by PP
1.	Para 8, Point No. 8, Page 5 of 11	Total water requirement is 147.5 m ³ /day of which fresh water requirement of 143.5 m ³ /day and will be met from ground water using bore well. Effluent of 74 m ³ /day quantity will be treated through ETP and sent to CETP for further treatment and	<i>Total water requirement is 147.5 m³/day of which fresh water requirement of 143.5 m³/day and will be met from ground water using bore well.</i> <i>Effluent of 74 m³/day quantity will be treated through Existing Primary, Secondary</i>	Apicore Pharmaceuticals Pvt. Ltd. is a lifetime member of EICL, CETP with 80.75 KLD booked quantity since inception of this project & also its within capacity of this Expansion Incremental Requirement. Apicore is also paying for total flow of 80.75 KLD since last 5 years, also invested in Deep Sea Discharge initiative of Chief Minister of Gujarat Government Funded Project (Please find attached herewith Project Description attached as Annexure II). The existing ETP

		<p>disposal. The committee suggested to adopt the complete ZLD. The project proponent was agreed with the same</p>	<p><i>Extended Biological ETP and sent to CETP, Enviro Infrastructure Company Limited (EICL) for further treatment and disposal. Apicore Pharmaceuticals Pvt. Ltd. is a Lifetime Member of EICL, CETP since inception of the company and Existing EC granted by MoEF&CC, New Delhi in 2008.</i></p>	<p>is having 75 KLD design capacity and with incremental load of Effluent (i.e., 74 KLD), existing ETP with Primary, Secondary and Tertiary treatment will cater and suffice the expansion incremental load requirement. Please find attached herewith ETP Scheme with Photographs attached as an Annexure III for your quick and ready reference purpose. Further, we are attaching herewith Total Water Balance diagram along with effluent generation for CETP discharge in Annexure III.</p> <p>Further, EICL, CETP is having total treatment capacity of 4500 KLD and at present, EICL, CETP is performing half of its allotted capacity. The performance report of EICL, CETP from GPCB Annual Report and Monthly Performance report is attached herewith as an Annexure IV. All the months performance monitoring reports are available at GPCB website.</p> <p>Further, there is no single Non-compliance recorded by Gujarat Pollution Control Board (GPCB) and EICL, CETP towards Apicore Pharmaceuticals Pvt. Ltd. Please find attached Performance Letter issued by CETP to Apicore Pharmaceuticals Pvt. Ltd. (Pl. find attached as an Annexure V). Further, in existing Environmental Clearance</p>
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				<p>granted by MoEF&CC, New Delhi in which, effluent discharge is EICL, CETP only. Further, our treated effluent is linked with Online Effluent Monitoring System provided by Forbes Marshall and the system server is synchronized with CPCB and GPCB. Till date, we have never crossed 700 PPM discharge COD limits and actually we are further diluting them for better performance and characteristics of effluent.</p>
2.	<p>Specific Condition, Para 2, Point (ii), Page 6 of 11</p>	<p>As already committed by Project Proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.</p>	<p><i>Effluent of 74 m³/day quantity will be treated through ETP and sent to CETP, Enviro Infrastructure Company Limited (EICL) for further treatment and disposal.</i></p>	<p>PP reported that all API products are unique with reaction chemistry as well as unique molecules. We are using DM / Sterile Water for manufacturing of Bulk Drug APIs & Sterile API and hence, we are not going to reuse Zero Liquid Discharge water into the process. Further, total Effluent / Wastewater generation will be 74 KLD in which, the entire water will not be required in Utility (32 KLD water shall be required in Utilities).</p> <p>In continuation, being unique API molecules manufacturer and as per USFDA compliance requirement, we are not reusing recovered solvent in manufacturing again and hence Solvent Recovery is not applicable to our unit.</p> <p>In continuation of aforesaid facts and being a small</p>

				<p>Pharmaceutical Company (Turn Over is 80 Crore and Expansion Cost is 8.88 Crore), PP is requesting Expert Appraisal Committee (EAC- Industry III) to allow the existing and proposed expansion effluent discharge at CETP (As per Existing EC 37.35 KLD effluent discharge and requesting for total load of effluent in CETP only). In detailed, we would like to justify more into the same as follows:</p> <p>During 17th EAC meeting dated 25.02.2020, after discussions with all EAC Members, following instruction were delivered and instructed to Project Proponent for ZLD scheme:</p> <p>❖ Unit shall install ZLD System for proposed load of effluent or unit shall ask CETP to install ZLD system. In this regard, PP had communicated with EICL, CETP Director and in turn, PP received CETP response.</p>
3.	Specific Condition, Sr. No. (xiv), Page 7 of 11	Fly ash should be stored separately as per CPCB guideline so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.	<i>At present, we are using LDO as a fuel in Boiler and the same practice shall be followed after Proposed Modernization of Bulk Drugs and Bulk Drug Intermediate.</i>	<i>LDO is a fuel and hence no Fly Ash shall be generated from anywhere.</i>

Deliberations in the EAC:

The EAC has made a detailed deliberation on the proposal. The Committee noted that the condition of ZLD has been stipulated after deliberations in earlier Committee and the same was agreed by the PP. The PP has now informed the Committee that, feasibility study has been conducted and found that ZLD is not viable and PP has membership in CETP. The Committee has agreed to the proposal of the PP, but suggested to utilize the treated water in various utilities in the unit, after in house treatment or procuring treated water from CETP to reduce the fresh water demand. Regarding the condition, of fly ash, it shall be mentioned as not applicable.

*The Committee, after detailed deliberations and considering the plant is not located in critically polluted area, has **recommended** for amendment in the EC conditions, as under:*

“Effluent of 74 cum/day shall be treated in ETP and treated effluent proposed to be discharged to CETP, Enviro Infrastructure Company Limited (EICL) for further treatment and disposal shall conform to the standards prescribed under the Environment (Protection) Act, 1986. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture. The project proponent shall also explore the utilities of the treated water from the CETP and reduce the fresh water demand in the unit”.

Agenda No. 3.19

Setting up of various Insecticides for veterinary animal health and household use manufacturing unit of capacity 757.2 MTPA located at Plot No.18, Survey No.300, Village Indra, Taluka Kadi, District, Mehsana, Gujarat - by M/s Synergia Sciences Pvt. Ltd- Amendment in Environment Clearance

[IA/GJ/IND2/186521/2020, IA-J-11011/197/2019-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 01/12/2020 to the project for manufacturing of various Insecticides for veterinary animal health & household use (757.2 TPA) located at Plot No. 18, Survey No. 300, Village Indrad, Taluka Kadi, District Mehsana, Gujarat in favour of M/s Synergia Sciences Pvt. Ltd.

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

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised / read as	Justification / Reasons
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1.	Specific Condition A (xi) - Para 6 at Page 5 of 7	Total fresh water requirement shall not exceed 71 cum/day proposed to be met from Gujarat Water Supply & Sewerage Board. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	Total fresh water requirement shall not exceed 71 cum/day proposed to be met from own Borewell. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	PP had applied online for obtaining fresh water supply connection from GWSSB through Industry Facilitation Portal (IFP) vide application ID 1491137 dated 05/08/2020. However, GWSSB has declined our request to provide private connection for water supply at our project site. There is no availability of alternate source of water supply (surface water) other than borewell for proposed project. Referring to the new Notification by Ministry of Jal Shakti vide S.O. 3289 (E) dated 24/09/2020, PP has submitted an application to CGWA for obtaining NOC for withdrawal of ground water @71 m ³ /day from own Borewell vide application number 21-4/6593/GJ/IND/2020 dated 21/10/2020.
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Deliberations in the EAC:

The EAC has deliberated on the proposal. The Committee after detailed deliberations, considering the justifications submitted by the PP, has recommended for utilization of ground water, subject to proper rainwater harvesting and utilization in the unit.

*The Committee has accordingly **recommended** for amendment in the condition as under:*

“Total fresh water requirement shall not exceed 71 cum/day proposed to be met from own Borewell. Necessary permission in this regard shall be obtained from the concerned regulatory authority/CGWA in this regard and renewed from time to time. The project proponent shall ensure rainwater harvesting and utilization if the collected water for reducing the ground water demand”.

Agenda No. 3.20

Expansion of Pesticides, Pesticide Specific Intermediates and Synthetic Organic Chemicals Manufacturing Unit from 7430 TPA to 15775 TPA at Plot No.3501-3515, 6301-6313 & 16 M Road/B1 and Plot No.6008-6010, GIDC Industrial Estate Ankleshwar, District Bharuch (Gujarat) by M/s Deccan Fine Chemicals India Pvt Ltd – Amendment in Environment Clearance

[IA/GJ/IND2/186135/2020, J-11011/749/2008-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated 6th Feb 2020 to the project for Manufacturing of Pesticides and Synthetic Organic Chemicals located at Plot no. 3501 -3515, 6301 -6313 & 16 M Road/ B1, and Plot No. 6008 - 6010, GIDC Industrial Estate Ankleshwar, District Bharuch, Gujarat in favour of M/s Deccan Fine Chemicals (India) Pvt Ltd.

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

S. No	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	File No. J-11011/749/2008 – IA II (I), dated 06/02/2020, Condition No. 6 of Page No. 3 para No. 3 of approved EC:	It was further informed that total fresh water consumption shall be reduced from 1483 KLD to 1258 KLD and total treated effluent discharge shall be reduced from 825 KLD to 600 KLD, after the proposed expansion. It was agreed to reduce discharge of treated effluent @20% every following year.	It was further informed that total fresh water consumption shall be reduced from 1483 KLD to 1258 KLD and total treated effluent discharge shall be 825 KLD after the proposed expansion.	PP has been operating the existing manufacturing facility with thin margins. We proposed for this expansion to make the plant financially viable. The condition related to “20 % reduction in the discharge of effluent every following year” will make our operations non-viable. Any further increase in operating and energy costs due to additional membrane systems and Evaporation systems will make this plant financially sick.
2.	File No. J-11011/749/2008 – IA II (I), dated	The treated effluent of 600 cum/day shall conform to the	The treated effluent of 825 cum/day shall	PP has been operating the existing manufacturing facility with thin margins. We

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
	06/02/2020, Condition No. 11 (ii) of Page No. 4 of approved EC:	standards prescribed under the Environment (Protection) Rules, 1986, for discharges into deep sea through the conveyance system of M/s. Narmada Clean Technology.	conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharges into deep sea through the conveyance system of M/s. Narmada Clean Technology.	proposed for this expansion to make the plant financially viable. The condition related to "20 % reduction in the discharge of effluent every following year" will make our operations non-viable. Any further increase in operating and energy costs due to additional membrane systems and Evaporation systems will make this plant financially sick.
3.	File No. J-11011/749/2008 – IA II (I), dated 06/02/2020, Condition No. 11 (iii) of Page No. 4 of approved EC	The project proponent shall achieve zero liquid discharge within five years of commissioning of expansion project.	--	PP has been operating the existing manufacturing facility with thin margins. We proposed for this expansion to make the plant financially viable. The condition related to "20 % reduction in the discharge of effluent every following year" will make our operations non-viable. Any further increase in operating and energy costs due to additional membrane systems and Evaporation systems will make this plant financially sick.

Deliberations in the EAC:

The EAC has made detailed deliberations on the proposal. The Committee has been informed that, as per the initial proposal submitted by the PP, it was proposed for discharge of effluent to the sea after treatment. However, based on the deliberations in the earlier Committee and decisions taken in the Ministry at that time, it was desired to achieve ZLD. The project proponent has informed the Committee that, a detailed techno-feasibility study has been undertaken on

the ZLD aspect, and found that the project won't be viable with ZLD and requested for permission for marine discharge. It was informed that further increase in operating and energy costs due to additional membrane systems and evaporation systems will make the plant financially sick.

The Committee after detailed deliberations, and considering the facts and figures submitted by the project proponent on the viability of the project vis-à-vis ZLD, has agreed for marine discharge and **recommended** for amendment in the EC as under:

“The treated effluent of 825 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharges into deep sea through the conveyance system of M/s Narmada Clean Technology”.

However, the Committee, recommended the PP to explore the feasibility of achieving Zero Liquid Discharge System within ten years of commissioning of the project, and to achieve 40 % reduction in effluent discharge to marine environment after five years.

Agenda No. 3.21

Expansion of existing project for manufacture of mining explosives and proposed high energy defence products by M/s CDET EXPLOSIVE INDUSTRIES PVT. LTD located at Village Mouza - Talegaon (S.P), Taluka - Ashti, Dist- Wardha, Maharashtra..- Reconsideration of Corrigendum in Environmental Clearance [IA/MH/IND2/74917/2018, IA-J-11011/166/2018-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter, File No. IA-J-11011/166/2018-IA II (I), dated. 19/08/2020 for the project, “Expansion of existing project for manufacture of mining explosives and proposed high energy defence products” located at Village Mouza - Talegaon (S.P), Tal-Ashti, Dist- Wardha, Maharashtra in favour of M/s. CDET Explosive Industries Pvt. Ltd.

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

S. No.	EC Point No.	EC Point	Justification/ reasons	Desired Correction in EC	Further consideration sought by Project proponent	Remark of the Committee.
2	Point No. 6	Total water requirement is estimated to be 839	PP beg to submit that during the presentation and ADS submission,	Post expansion total water requirement	We submit that for ground water, the proposed	The committee

	<p>cum/day, which includes fresh water requirement of 799 cum/day, proposed to be met from ground water. Effluent of 262 cum/day will be treated through ETP. The plant will be based on Zero Liquid discharge system. It was informed that making suitable rainwater harvesting system in the project area, fresh water requirement shall be brought down to zero and thus there is no fresh water requirement in the project.</p>	<p>the Industry had informed that it has obtained permission from CGWB for existing project fresh water use of 327.4 KLPD, and sought permission for additional fresh water of 471.6 KL/day for the proposed project while making additional efforts to harvest rain water for use and for ground water recharging. We also submitted that land area available for water harvesting is not enough for storage of water (surface water pond within plant is not possible) for use throughout the year. Further, since the Plant is manufacturing explosives, it is necessary to have enough water always for any contingency as per PESO norms. The Committee kindly</p>	<p>is estimated to be 839 cum/day, which includes fresh water requirement of 799 cum/day, proposed to be met from ground water. Effluent of 262 cum/day will be treated through ETP. The plant will be based on Zero Liquid discharge system. It was informed that making suitable rainwater harvesting system in the project area, additional freshwater requirement shall be brought down. Post expansion total fresh</p>	<p>additional requirement for expansion project as per EIA report and presentation dt. 20 Feb' 2020 was 471.6 KLPD and total requirement was 799 (existing + proposed expansion figures) post expansion. We have already reduced this proposed additional requirement to 155 KLPD for proposed expansion and total post expansion requirement to 482.4 KLPD. We honored the decision of EAC during presentation for Environment Clearance in Feb'2020. We, therefore, request you to kindly consider this</p>	<p>has agreed for the amendment proposed.</p>
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			<p>agreed during presentation to let the proponent continue to draw existing ground water requirement, and advised to minimize additional ground water requirement for new proposed project. We have accordingly worked to limit fresh make up water requirement for proposed project to 155 KPLD instead of earlier proposed 471.6 KPLD. In addition as per CGWB regional scenario the area is in safe zone from groundwater point of view. We have already submitted CGWB NOC renewal for ground water use in compliance of ADS. PP have already made this submission vide our letter dt. 20/03/2020.</p>	<p>make up water requirement: 482.4 KLPD. Source of water, ground, CGWB permission obtained.</p>	<p>significantly reduced additional quantity of ground water 155 KLPD and approve for 482.4 KLPD (existing 327.4 + 155 = 482.4) after expansion. CGWB NOC obtained for 482.4 KLPD, pl note. PP ready to conduct detailed techno feasibility study report after grant of EC. Please note as per CGWB records the area is safe zone.</p>	
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			PP therefore request that this point may be suitably changed to reflect permission to use ground water as per existing CGWB NOC as on date of Environmental Clearance i.e 482.4 KLPD.			
4	Point No. 13 (xi)	As proposed, fresh water requirement shall be met through rain water harvesting. No water shall be drawn from the tube well/ground water for Industrial purpose.	PP have already made submission regarding this in Sr. No. 2 of this letter. PP therefore request that this point may be suitably changed to reflect permission to use ground water as per existing CGWB NOC as on date of Environmental Clearance.	As proposed, maximum additional fresh water requirement shall be met through rain water harvesting. No water above existing CGWB NOC on date of EC shall be drawn from the tube well / ground water for Industrial purpose. Post expansion total fresh make up water requirement 482.4 KLPD.	PP have already made submission regarding this in Sr. No. 2 of this letter. PP therefore request that this point may be suitably changed to reflect permission to use ground water as per existing CGWB NOC as on date of Environmental Clearance.	The committee has agreed for the amendment proposed.

				Source of water, ground, CGWB permission obtained.		
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The Committee, after detailed deliberations, has **recommended for amendment in the EC** dated 19/08/2020 as proposed by PP with All other terms and conditions stipulated therein shall remain unchanged.

Agenda No. 3.22

Expansion of Pesticide & Pesticide Specific Intermediate in Existing Unit at Plot No: 3207/B, 3207/A, 3208/1, 3208/2 & 3202/A/1, GIDC Industrial Estate, Ankleshwar, TAL: Ankleshwar, Dist: Bharuch, Gujarat of M/s Hemani Industries Ltd (Unit-2)- Amendment in Environmental Clearance

[IA/GJ/IND2/179120/2020, IA-J-11011/111/2017 –IA II (I)]

The proposal is for Corrigendum (for addition of Plot No.) in the Environmental Clearance granted by the Ministry vide letter dated March 15, 2018 to the project for Expansion of Pesticides and Pesticide Specific Intermediate in Existing Unit at Plot No. 3202/A/1, 3207/A, 3207/B, 3208/1 & 3208/2, GIDC Industrial Estate, Ankleshwar, Tal: Ankleshwar, Dist: Bharuch, Gujarat, India of M/s. Hemani Industries Ltd. (Unit-II)

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

Sr. No.	Subject	Justification by PP
1	Environmental Clearance Corrigendum	<p>It is proposed to add all plot no. 3207/B, 3207/A, 3208/1, 3208/2, 3202/A/1 instead of 3208, GIDC Industrial Estate-Ankleshwar, Taluka: Ankleshwar, Dist: Bharuch, Gujarat of M/s. Hemani Industries Limited (Unit-II).</p> <p>The plot was initially entitled as Plot No. 3208 and all the Plot No.'s i.e. Plot No. 3202/A/1, 3207/A, 3207/B, 3208/1 & 3208/2 were covered in it but now as per the State Pollution Control Board requirements for grant of CC&A, there is need for mention of all the separate Plot Numbers in EC Letter and the area will remain same i.e. 33570 m². Hence unit has applied for EC Corrigendum.</p>

Deliberations in the EAC:

The EAC has deliberated on the proposal. The Committee noted that the EC has been granted by the Ministry based on the EIA/EMP report submitted by the project proponent, with the location/Survey Nos. of the project site as mentioned. The Committee was of the considered view that, as there is no addition of land, no increase in land area etc, there is no requirement of further amendment/corrigendum in the EC. **The SPCB or the concerned regulatory authorities can sanction their permission after verifying the land documents/survey nos provided by the project proponent, or after verification through the GIDC.** There is no requirement of issuance of any amendment/corrigendum from the EAC/Ministry in this regard. The EAC is of the opinion that the Ministry may communicate the recommendations to SPCB for their necessary action.

*The Committee has accordingly desired to **return** the proposal as there is no requirement of amendments in EC in this regard.*

Agenda No. 3.23

Expansion in Pesticide & Intermediates Manufacturing Unit at Plot No. 3-11, A-2/1, A-2/2, A-2/6 & A-1/2, Phase-I, GIDC Estate, Vapi-396195, Dist. Valsad, Gujarat by M/s UPL LIMITED - Amendment in Environmental Clearance

[IA/GJ/IND2/71396/2016, IA-J-11011/330/2016-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by Ministry vide letter dated 25-11-2019 to the project for Expansion of Pesticide & Pesticide Specific Intermediates Manufacturing Unit Located at Plot No 3-11,A-2/1,A-2/2,A2/6 & A-1/2, Notified Industrial Estate, Phase 1, GIDC Vapi, District : Valsad (Gujarat) in Favour of M/s UPL Limited.

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

S. No	Para of EC issued by MoEF& CC	Details as per EC	To be Revised / Read as	Justification (Reasons) by PP
1	Subject	Expansion of Pesticides and Specific	Expansion of Pesticides and Specific	• Acquired New Adjacent Plot No 2/1 Located in Notified industrial Area, GIDC, Phase-I, Vapi, admeasuring area of 21843.49 M ²

		Intermediate Manufacturing Unit by M/s UPL Ltd at Plot No 3-11,A-2/1,A2/2,A2/6 & A1/2, Phase I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat) – Environmental Clearance – reg.	Intermediate Manufacturing Unit by M/s UPL Ltd at Plot No 3-11, A-2/1,A2/2,A2/6,A1/2 & 2/1 , Phase I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat) – Environmental Clearance – reg.	<ul style="list-style-type: none"> • PP propose the addition of Plot No 2/1 to Existing Granted EC without Increase in Production Capacity. • PP propose the addition of Plot No 2/1 to Existing Granted EC without Increase in Pollution Load. • Proposal is Change in Only Physical Boundary. • The Existing Site & New Plot are located in Notified Industrial Area Vapi. • PP requested to Add Adjacent Plot No 2/1 in Subject Line Item.
2	EC Condition No - 2	The MoEF&CC has examined the proposal for Environmental Clearance to the Expansion of Pesticides and pesticide specific Intermediate manufacturing unit from the present capacity of 1541 TPM to 4097 TPM	The MoEF&CC has examined the proposal for Environmental Clearance to the Expansion of Pesticides and pesticide specific Intermediate manufacturing unit from the present capacity of 1541 TPM to 4097 TPM by M/s UPL Ltd in total area	<ul style="list-style-type: none"> • Acquired New Adjacent Plot No 2/1 Located in Notified industrial Area GIDC, Phase – I, Vapi, admeasuring area of 21843.49 M² • PP propose addition of Plot No 2/1 to Existing Granted EC without Increase in Production Capacity. • PP propose addition of Plot No 2/1 to Existing Granted EC without Increase in Pollution Load. • PP Requested to Merge Existing Plot Area with New Plot Area & Addition of Adjacent Plot Number.

		by M/s UPL Ltd in total area of 69,639 Sq M at Plot no 3-11, A-2/1,A2/2,A2/6 & A1/2, Phase I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat)	of 91482.49 Sq M at Plot no 3-11, A-2/1,A2/2,A2/6, A1/2 & 2/1 Phase I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat)																			
3	EC Condition No - 4	The Land Area Available for Project is 69639 Sq M and No additional land required for the proposed expansion. Industry has already developed green belt /plantation in an area of 33% of project area covering 2691 sqm at project site and 20,308 Sq M at Vikram	The Land Area Available for Project is 91482.49 Sq. M and No additional land required for the proposed expansion. Industry has already developed green belt /plantation in an area of 51.98 % of project area covering 5428.44 sqm at project site and 20,308 Sq M at Vikram Farm, Nahuli	<ul style="list-style-type: none"> Addition of New Plot Area in Sq M & Amendments with respect to Cost and Green Belt. The Area Details are Tabulated Below. The Existing and New Plot are located in GIDC Vapi. <table border="1"> <thead> <tr> <th>S r. No</th> <th>Particular</th> <th>Existing Plot No 3-11,A-2/1, A-2/2, A-2/6 & A-1/2</th> <th>New Plot no 2/1</th> <th>Total</th> <th>% of Area</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Land Area in M2</td> <td>69639</td> <td>21843.49</td> <td>91482.49</td> <td>100 %</td> </tr> <tr> <td>B</td> <td>Green Belt Area in Factory in M²</td> <td>2691</td> <td>2737.44</td> <td>5428.44</td> <td>5.93 %</td> </tr> </tbody> </table>	S r. No	Particular	Existing Plot No 3-11,A-2/1, A-2/2, A-2/6 & A-1/2	New Plot no 2/1	Total	% of Area	A	Land Area in M2	69639	21843.49	91482.49	100 %	B	Green Belt Area in Factory in M ²	2691	2737.44	5428.44	5.93 %
S r. No	Particular	Existing Plot No 3-11,A-2/1, A-2/2, A-2/6 & A-1/2	New Plot no 2/1	Total	% of Area																	
A	Land Area in M2	69639	21843.49	91482.49	100 %																	
B	Green Belt Area in Factory in M ²	2691	2737.44	5428.44	5.93 %																	

		<p>Farm, Nahuli Village.</p> <p>The estimated project cost is Rs. 28563.13 Lakhs excluding existing investment of Rs. 23,800 Lakhs.</p> <p>Total Capital cost earmarked towards Environmental pollution control measures is Rs. 3414.11 Lakhs and recurring cost (Operation and Maintenance) will be about Rs. 949.2 lakhs/Annum. Total Employment opportunity will be for 679 persons</p>	<p>Village & 21,818 Sq. M on NHAI/GIDC land surrounding periphery of plot.</p> <p>The estimated project cost is Rs. 30752.57 Lakhs excluding existing investment of Rs. 23,800 Lakhs.</p> <p>Total Capital cost earmarked towards Environmental pollution control measures is Rs. 3414.11 Lakhs and recurring cost (Operation and Maintenance) will be about Rs. 949.2 lakhs/Annum. Total</p>	<p>Green Belt Area in Vikram Farm in M²</p>	<p>20308</p>	<p>0.00</p>	<p>20308</p>	<p>22.20%</p>
<p>Green Belt Area in NHAI/GIDC Surrounding Periphery of Plot in M²</p>	<p>0.00</p>	<p>21818</p>	<p>21818</p>	<p>23.85%</p>				
<p>TOTAL GREEN BELT AREA in M²</p>	<p>22,999</p>	<p>24540.49</p>	<p>47554.44</p>	<p>51.98%</p>				
<ul style="list-style-type: none"> The Additional Cost of Land Rs. 2189.44 Lakhs Will be added to Project cost hence Total revised cost of project will be Rs.30752.57 Lakhs. No changes in Cost of Environmental Pollution Control Measures and Employment. 								

		directly & 100 persons indirectly after expansion.	Employment opportunity will be for 679 persons directly & 100 persons indirectly after expansion.	
4	EC Condition No - 11	Based on the proposal submitted by the project proponent and recommendations of EAC (Industry 2), The MoEF&CC hereby accords Environmental Clearance to the project for Expansion of Pesticides and Specific Intermediates Manufacturing Unit by M/s UPL Ltd at Plot No 3-11,A-2/1,A2/2,A2/6 & A1/2, Phase I, GIDC Notified	Based on the proposal submitted by the project proponent and recommendations of EAC (Industry 2), The MoEF&CC hereby accords Environmental Clearance to the project for Expansion of Pesticides and Specific Intermediates Manufacturing Unit by M/s UPL Ltd at Plot No 3-11,A-2/1,A2/2,A2/6, A1/2 & 2/1, Phase I, GIDC Notified Industrial	<ul style="list-style-type: none"> • PP Requested to Add Adjacent Plot No 2/1 in Address.

		Industrial Area Vapi, District Valsad (Gujarat), under the provisions of the EIA Notification, 2006, read with subsequent amendments therein, subject to compliance of the terms and conditions as environmental safeguards, as under:-	Area Vapi, District Valsad (Gujarat), under the provisions of the EIA Notification, 2006, read with subsequent amendments therein, subject to compliance of the terms and conditions as environmental safeguards, as under:-	
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Deliberations in the EAC:

The EAC has deliberated on the proposal. The Committee has made detailed deliberations on the layout and plot plan. The Committee noted the proposed plots are in the Industrial area and are adjacent to the existing land of the project proponent and the amendment proposed by the project proponent can be considered.

The Committee after detailed deliberations has **recommended** for amendment in the EC as proposed by the project proponent with the details are as under:

Subject, para 2, para 11 to be read as :

“Expansion of Pesticides and pesticide specific Intermediates manufacturing unit from the present capacity of 1541 TPM to 4097 TPM by M/s UPL Ltd in total area of 91482.49 Sq M at Plot no 3-11, A-2/1, A2/2, A2/6, A1/2 & 2/1 Phase I, GIDC Notified Industrial Area Vapi, District Valsad (Gujarat)”.

Para 4 to be read as:

“The land area available for project is 91482.49 sqm. Industry has developed green belt /plantation in an area of 51.98 % of project area covering 5428.44 sqm at project site and 20,308 sqm at Vikram Farm, Nahuli Village & 21,818 sqm on NHAI/GIDC land surrounding periphery of plot. The estimated project cost is Rs. 30752.57 Lakhs excluding existing investment of Rs. 23,800 Lakhs.....”.

Agenda No. 3.24

Agrochemical products & Intermediates without increase production capacity and pollution load at Plot No. D2/CH-14, DAHEJ - II, GIDC Industrial Estate, Tal: Vagra, Dist: Bharuch, Gujarat of M/s Crystal Crop Protection Pvt Ltd - Amendment in Environmental Clearance

[IA/GJ/IND2/178434/2020, J-11011/7/2016-IA II (I)]

The proposal is for modification in the Environmental Clearance granted by the Ministry vide letter dated 22nd January 2019 for the project of setting up of pesticide technical (3175 MT/ANNUM) at Plot No. D2/CH/14, GIDC Dahej-2, Taluka: Vagra, District: Bharuch, Gujarat – Environmental Clearance reg. to M/s. Crystal Crop Protection Pvt. Ltd.

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

S . N o .	Point of EC issued by MoEFCC	Details as per the EC	To be revised	Justific ation/Re asons																												
1	Point No. 6	The details of products are as under: <table border="1" data-bbox="407 1478 881 1902"> <thead> <tr> <th data-bbox="407 1478 496 1650">Sr. No.</th> <th data-bbox="496 1478 740 1650">Products</th> <th data-bbox="740 1478 881 1650">Quantit y (MT/Year)</th> </tr> </thead> <tbody> <tr> <td data-bbox="407 1650 496 1692">1</td> <td data-bbox="496 1650 740 1692">Boscalid</td> <td data-bbox="740 1650 881 1692">30</td> </tr> <tr> <td data-bbox="407 1692 496 1734">2</td> <td data-bbox="496 1692 740 1734">Cyproconazole</td> <td data-bbox="740 1692 881 1734">20</td> </tr> <tr> <td data-bbox="407 1734 496 1818">3</td> <td data-bbox="496 1734 740 1818">Difenaconazol e</td> <td data-bbox="740 1734 881 1818">20</td> </tr> <tr> <td data-bbox="407 1818 496 1860">4</td> <td data-bbox="496 1818 740 1860">Flutriafol</td> <td data-bbox="740 1818 881 1860">30</td> </tr> <tr> <td data-bbox="407 1860 496 1902">5</td> <td data-bbox="496 1860 740 1902">Epoconazole</td> <td data-bbox="740 1860 881 1902">40</td> </tr> </tbody> </table>	Sr. No.	Products	Quantit y (MT/Year)	1	Boscalid	30	2	Cyproconazole	20	3	Difenaconazol e	20	4	Flutriafol	30	5	Epoconazole	40	Revised Product list is given below: <table border="1" data-bbox="914 1520 1369 1860"> <thead> <tr> <th data-bbox="914 1520 979 1692">S r. N o.</th> <th data-bbox="979 1520 1227 1692">Products</th> <th data-bbox="1227 1520 1369 1692">Quantit y (MT/Year)</th> </tr> </thead> <tbody> <tr> <td data-bbox="914 1692 979 1734">1</td> <td data-bbox="979 1692 1227 1734">Metribuzin</td> <td data-bbox="1227 1692 1369 1734" rowspan="3"></td> </tr> <tr> <td data-bbox="914 1734 979 1776">2</td> <td data-bbox="979 1734 1227 1776">Pretilachlor</td> </tr> <tr> <td data-bbox="914 1776 979 1860">3</td> <td data-bbox="979 1776 1227 1860">Clodinofob- propargyl</td> </tr> </tbody> </table>	S r. N o.	Products	Quantit y (MT/Year)	1	Metribuzin		2	Pretilachlor	3	Clodinofob- propargyl	Demand of granted products in EC & CTE is not more. So company has to change
Sr. No.	Products	Quantit y (MT/Year)																														
1	Boscalid	30																														
2	Cyproconazole	20																														
3	Difenaconazol e	20																														
4	Flutriafol	30																														
5	Epoconazole	40																														
S r. N o.	Products	Quantit y (MT/Year)																														
1	Metribuzin																															
2	Pretilachlor																															
3	Clodinofob- propargyl																															

		6	Hexaconazole	200	4	Quizalofop ethyl	3125	the list of products without increase the production capacity and without increase the pollution load.		
		7	Kresoxim methyl	30	5	Cloquintocet				
		8	Mancozeb	400	6	Ben/Halo/Pyrazo Sulfuran				
		9	Metalaxyl	100	7	Oxidiazon				
		10	Pencycuron	30	8	Clethodium				
		11	Propiconazole	100	Intermediates					
		12	Propineb	30	9	2,6 DCQ (2, 6-Dichloroquinoline)				
		13	Prothioconazole	25	10	1,2,4 Triazinone				
		14	Thiophnate methyl	100	11	DEPA (2,6 Diethyl -N- (2 - Propoxy Ethyl) amine)				
		15	Tricyclazole	100	12	EHPPA (2,4 Hydroxyphenox y)-Propaonic Acid Ethyl Ester				
		16	Bispyribac Sodium	100	13	RHPPA (2-(4-Hydroxyphenox y)-(2R) propanoic acid)				
		17	Clodinfob-propargyl	100	14	Pilot trials			50	
		18	Dicamba	20	Total				3175	
		19	Diuron	20						
		20	Imezathapyr	100						
		21	Metribuzine	100						
		22	Oxyfluorfen	100						
		23	Pendimethalin	400						
		24	Penoxsulam	40						
		25	Propanil	40						
		26	Propaquizafop	100						
		27	Quizalofop ethyl	100						
		28	Terbuthylazine	50						
		29	Diafenthuron technical	100						
		30	Fenpyroximate	100						
		31	Flubendiamide	250						
		32	Thiamethoxam	200						
		Total		3175						
2	Specific Condition (iii):	Total effluent not exceeding 80 m ³ /day shall be sent to GIDC drain for final disposal, only after its treatment meeting the standards prescribed under the Environment (Protection) Rule, 1986.			Due to change of product list, Total effluent not exceeding 79 m ³ /day shall be sent to GIDC drain for final disposal, only after its treatment meeting the standards prescribed under the				Only 1 m ³ /day effluent will be reduced due to	

			Environment (Protection) Rule, 1986.	change of product profile.
3	Specific Condition (vii):	To control source and the fugitive emission, other suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Existing steam boiler of 5 TPH will be discontinued and will install the new 1 No. of steam boiler capacity of 8 TPH with adequate stack height and ESP & new 1 No. of steam boiler capacity of 1 TPH. 1 of additional D G Set -330 KVA will install. 2 nos. of process vent will be discontinued and add 3 nos. of additional process vent will install.	Due to change product profile, engineering point of view, require more steam, So propose 1 No. of 8 TPH new boiler & 1 No. of 1 TPH new Boiler and 3 nos. of additional process vent will install.
4	Specific Condition (viii):	Total fresh water requirement shall not exceed 162 m ³ /day to be met from GIDC Water supply. Prior permission in this regard shall be obtained from concern regulatory authority.	Due to change of product list, Total fresh water requirement shall not exceed 154 m ³ /day to be met from GIDC Water supply. Prior permission in this regard shall be obtained from concern regulatory authority.	8 m ³ /day fresh water requirement will be reduced due to change of

				product profile.
5	Specific Condition (xii):	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Process organic residue will be reduced from 250 MT/Annum to 180 MT/Annum.	Due to change product profile, Process organic residue will be reduced.

Deliberations in the EAC:

The EAC has made a detailed deliberation in the proposal. The Committee noted that the project proponent proposed to change the product profile, without any increase in pollution load. **The Committee has been informed that the Ministry vide notification dated 23rd November, 2016 and 16th January, 2020 has streamlined the procedure for product mix change.** As per the Ministry's Notification dated 16th January, 2020, "Any change in raw material-mix or product-mix, change in quantities within products or number of products in the same category for which prior environmental clearance has been granted, shall be exempted from the requirement of prior environmental clearance provided there is no increase in pollution load and the resultant increase in production is not more than 50 percent of the production capacity permitted in the earlier environmental clearance and the project proponent shall follow the procedure for obtaining 'No Increase in Pollution Load' certificate from the concerned State Pollution Control Board". **After detailed deliberation EAC is of the view that Gujarat SPCB may take necessary action as per the provisions of the EIA Notification, 2006 (as cited above) and no amendment in EC is required for the above-mentioned proposal.**

*The Committee has accordingly desired to **return** the proposal as there is no requirement of the amendment in EC in this regard.*

Agenda No. 3.25

Expansion of Agrochemical & Intermediates Manufacturing Plant at ater Works Road, Aishbagh, Lucknow by M/s IPL SANDILA - Amendment in Environmental Clearance

[IA/UP/IND2/113976/2019, J – 11011/331/2016 – IA II (I)]

The project proponent has informed their inability to attend the EAC meeting due to some emergency. The PP has also not submitted any documents. The EAC tried to understand the proposal but nobody was there to address the concerns raised by the respected members of the Committee.

As desired by the PP, the Committee decided to **return** the proposal in its present form, for consideration at a later stage on request of the PP as and when required.

Agenda No. 3.26

Setting up of Chlorinated Paraffin Plasticizer Manufacturing Unit by M/s Suntek Plasticizer Private Ltd. located at Dandila Khurd, Near Grasim Industries Limited, Garwha Road, Rehla, Palamu, Jharkhand- Consideration of Environmental Clearance.

[IA/JH/IND2/122160/2019, IA-J-11011/320/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Perfact Enviro Solutions Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up Chlorinated Paraffin Plasticizer Manufacturing Unit at Tozi No 51, Thana No. 40, Khewat No. 1; Halka No. 7; Khata No. 19/295, 19/296, 40/328, 40/331, 46/329, Dandila Khurd village, Bishrampur, Palamu, Jharkhand by M/s Suntek Plasticizer Private Limited.

The details of products and capacity as under:

S.No.	Product	Capacity	
		TPA	TPD
Product			
1.	Chlorinated Paraffin Plasticizer (CPP)	42000	120
By-Product			
2	Hydrochloric Acid (30-32%)	66500	190

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

The Standard ToR (Terms of Reference) had been granted to the project by Ministry vide letter No. IA-J-11011/320/2019-IA-II(I); dated 08-12-2019. Public consultation for this project was conducted by State Pollution Control Board which was presided over by the Addl. Deputy Commissioner. The project proponent has given commitment to fulfil the environmental and social responsibility for development of the community of nearby villages. It is informed that no litigation is pending against the proposal.

The total plot area is 4350.376 m². Industry will develop greenbelt in an area of 33.2 % i.e., 1420.45 m² out of the total area of the project. Total cost of the project is Rs.7.650 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.84.5 Lakhs and the Recurring cost (operation and maintenance) will be about Rs.11 Lakhs/year. Total Employment will be 30 persons for the construction of the proposed facility and 45 no. of staff has been estimated for the proposed project in several levels i.e. Manager, Skilled, Semi-skilled, unskilled and clerk.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site.

Ambient air quality monitoring was carried out at 8 locations during October 2019-December 2019. The baseline data indicates the ranges of concentrations as: PM₁₀ (60.92-78.69 µg/m³), PM_{2.5} (31.04 - 40.10µg/m³), SO₂ (8.97- 11.58 µg/m³) and CO (0.60- 0.78 mg/m³), (NO₂ (20.1 - 25.96 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.221 µg/m³, 0.512 µg/m³, 0.209 µg/m³ 6.52 mg/m³ and 0.602 µg/m³ with respect to PM_{2.5}, PM₁₀, SO_x CO and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement will be 140.3 m³/day, out of which fresh water requirement of 137 m³/day will be met from ground water. Effluent of 3.8 KLD quantity will be treated through ETP of capacity 5 KLD. The plant will be based on Zero Liquid Discharge system.

The power requirement of the unit will be 300 kW which will be sourced from Jharkhand Bijli Vitran Nigam Limited (JBVNL). DG sets of 2x150 kVA shall be used for backup purposes only. Stack (height-2.4 m) will be provided as per CPCB norms to the proposed DG sets.

Details of Process emissions generation and its management is given below:-

Source of air pollution	Mitigation Measures
DG set back up: 2x150 kVA	Maintenance of stack height of 2.4 m above roof level
Chlorine gas emissions from reactor	Controlled using hood and recirculating back to chlorine gas evaporator
HCl fumes from Degasser	Re-circulation of HCl fumes to water scrubber using closed circuit
Excess HCl fumes from storage	Supply to M/s Grasim Industries Ltd. for neutralization/Sodium Hypo-chloride formation through pipeline.

Details of Solid waste/ Hazardous waste generation and its management is given below:-

Solid Waste Management:

Category	Type of Waste	Disposal method	Waste (in kg/day)
Bio Degradable	Organic waste (Includes Food & Kitchen waste, leaves, etc.)	Organic waste shall be given to approved vendor	12
Non-Biodegradable	Recyclable Waste (Includes Poly-bags, Plastic, Metal, Wood, Paper, Glass, Containers, etc.)	Shall be sent to approved recycler	8
Total			20 kg/day (7 TPA)

Non-Hazardous Waste Management:

There will be no generation of non-hazardous process waste as the raw materials/input will consequently get circulated within the process chamber only for formation of Chlorinated Paraffin Plasticizer and HCl fumes shall be scrubbed with water to produce Hydrochloric Acid and negligible Chlorine fumes from system shall be channelized to M/s Grasim Industries Limited for Sodium Hypochlorite production through pipeline.

Hazardous Waste Management:

Type	Quantity	Disposal
Used Oil	10 lit/month (0.12 kL/annum)	Shall be given to authorized hazardous waste recycler as per Hazardous and other Waste (Management & Transboundary Movement) Rules, 2016
Process Waste	1 kg/day (0.3 Tons/annum)	Shall be given to authorized hazardous waste recycler as per Hazardous and other Waste (Management & Transboundary Movement) Rules, 2016

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is satisfactory for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The committee deliberated the action plan for the reduction of particulate matter in the area. The committee recommended to prepare action plan for plantation and budget allocation for issue raised during the PH and green belt development. The committee recommended only to collect rain water from roof top and use for various purpose, but not allowed to recharge ground water. Based on the deliberations in the EAC, PP has submitted additional information. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). 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.
- (v). 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.
- (vi). 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.
- (vii). Total fresh water requirement shall not exceed 137 m³/day will be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (viii). 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.
- (ix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (x). 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 flame 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.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). The activities and the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.
- (xv). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.27

Establishment of Synthetic organic chemicals (Resin) manufacturing unit at Plot. No. s: 143, 143aa/143a3, 143/U, 143/E, 143/Ru, 144/A2, 149, 149/A, 149/Ru, 149/Ruu, 149lu Mothighanpur Village, Balanagar Mandal, Mahabubnagar District, Telangana, Mahubnagar, Telangana M/s Divya Sai Lam Private Limited- Consideration of Environment Clearance

[IA/TG/IND2/86907/2018, IA-J-11011/391/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

The Proposal is for Environmental Clearance (EC) to the project for Inclusion of synthetic organics chemicals (Resin) manufacturing unit in the decorative laminate manufacturing unit in an area of 8.04 acres located at Sy. No.s 143, 143aa/143a3, 143/U, 143/E, 143/Ru, 144/A2, 149, 149/A, 149/Ru, 149/Ruu and 149lu, Mothighanpur village, Balanagar mandal, Mahabubnagar district, Telangana by M/s. Divya Sai Lam Pvt. Ltd.

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

Standard ToR has been issued by Ministry vide letter no IA-J-11011/391/2018-IA II (I) dated 31.12.2018. Public Hearing for the proposed project has been conducted by the Telangana State Pollution Control Board on 18.09.2019 at 11.00 AM at within Mothighanpur Grampanchayat office. The main issues raised during the public hearing are related to employment, surrounding villages development and implementation of pollution control measures.

Deliberations in the EAC

The EAC has made a detailed deliberation on the proposal. The EAC has been informed that the project proponent obtained CTO for the decorative laminated manufacturing unit in the proposed site. **The Committee was of the view that operational status of the existing unit/compliance status of the CTO conditions shall be submitted through SPCB for appraisal of the project.**

The Committee has also deliberated on various technical and environmental data deficiencies in the proposal and desired for following requisite information/input, as under:

- (i) Project proponent shall revise the complete EIA/EMP Report providing all the requisite information.*
- (ii) Form -2 shall be revised with complete details of the project.*
- (iii) Details of existing project, along with copy of CTE/CTO.*
- (iv) Operation status of the existing unit/Compliance status of existing CTO conditions forwarded by the State PCB which is requisite documents as per TOR issued to the project. .*
- (v) Detailed process flow diagram.*
- (vi) Revised environmental conservation and plantation plan.*
- (vii) Public hearing issues, action plan and activities proposed..*

The proposal was accordingly **returned** in its present form for submission of revised Report.

Agenda No. 3.28

Setting up of Bulk Drugs Manufacturing Unit by M/s Orch Pharma Pvt Ltd located at RS No:3/1 & 3/2, Village Anumanchipalli, Mandal Jaggayyapeta, District Krishna, Andhra Pradesh -Consideration of Environmental Clearance [IA/AP/IND2/172555/2020, IA-J-11011/221/2020-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Rightsource Industrial Solutions Pvt. Ltd., made a detailed presentation on the salient features of the project and informed that:

The proposal is for Environmental Clearance to the project for establishment of API Manufacturing Unit of capacity 180 TPM at RS No: 3/1 & 3/2, Anumanchipalli Village, Jaggayyapeta Mandal, Krishna District, Andhra Pradesh State by M/s. Orch Pharma Pvt. Ltd. The details of products and capacity are as under:

S. No.	Name of the Product	Capacity (TPM)	CAS No
1	Aripiprazole	10.00	129722-12-9
2	Brexipiprazole	10.00	913611-97-9
3	Dolutegravir	10.00	1051375-16-6
4	Efavirenz	10.00	154598-52-4
5	Emtricitabine	10.00	143491-57-0
6	Etoricoxib	10.00	202409-33-4
7	Febuxostat	10.00	144060-53-7
8	Imatinib Mesylate	10.00	220127-57-1
9	Lamivudine	120.00	134678-17-4
10	Linezolid	20.00	165800-03-3
11	Lopinavir	10.00	192725-17-0
12	Mirabegron	10.00	223673-61-8
13	Prasugrel Hydrochloride	10.00	389574-19-0
14	Pregabalin	10.00	148553-50-8
15	Ranolazine	10.00	95635-55-5
16	Ritonavir	10.00	155213-67-5
17	Rivaroxaban	10.00	104227-87-4
18	Tenofovir Disoproxil Fumarate	10.00	147127-20-6
Total (Any 6 Products will be manufactured at any given point of time)		180.00	

LIST OF BY-PRODUCTS AND ITS QUANTITIES

S. No	Name of the product	Name of the By-product	Quantity In Kg/Day
1	Aripiprazole	Sodium bromide	129.25
2	Efavirenz	Sodium acetate	103.10
3	Emtricitabine	L-Menthol	355.40
		Triethylamine Hydrochloride	263.00
4	Etoricoxib	Morpholine	152.30
5	Febuxostat	Methyl cyanide	113.80
		Potassium bromide	227.60
6	Lamivudine	L-Menthol	3365.60
7	Linezolid	Imidazole	539.70
8	Lopinavir	Benzyl Alcohol	191.50
		Monosodium citrate	379.20
		Potassium chloride	306.90
		Monosodium citrate	326.20
9	Mirabegron	Acetic acid	235.30
		Ammonium sulphate	256.30
10	Pregabalin	Ammonium chloride	858.00
11	Ritonavir	Sodium acetate	191.50
		4-Nitro phenol	209.50
		Sodium phosphate	68.30
12	Rivaroxaban	Potassium chloride	122.80
		Triethylamine hydrochloride	334.80
13	Tenofovir Disoproxil Fumarate	Triethylamine hydrochloride	86.00

Note: The quantity of By-products based on respective products being manufactured.

The project/activities are covered under Category 'B2' of item 5 (f) 'Synthetic, Organic Chemicals Industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (interstate boundary within 5 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry. Public hearing is exempted as the project falls under category B2. It was informed that no litigation is pending against the proposal.

Existing land area is 13.5 Acres (54632.56 Sq. m). Industry will develop greenbelt in an area of 18212.0 sqm which is 33.33% of the total project area. The proposed project cost is about Rs.38.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.298 Lakhs and the recurring cost (operation and maintenance) will be about Rs.31 Lakhs per annum. Total Employment after expansion will be 200 persons. Industry proposed to allocate Rs.76 Lakhs for 5 years towards Corporate Environment Responsibility.

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

The total water requirement is 409.90 m³/day of which fresh water requirement of 294.83 m³/day will be met from Ground water supply. Generated effluent of 150.84 m³/day will be treated through stripper followed by MEE/ATFD, Biological Treatment Plant followed by RO. Plant will be based on Zero Liquid Discharge System.

Power requirement will be 2000 kVA and will be met from Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL). The unit is proposed to install 1 X 1000 kVA, 1 x 500 kVA & 1 x 380 kVA DG Sets, Stack (height 10 mts) will be provided for each as per CPCB norms to the proposed DG sets. 6.0 TPH & 4.0 TPH boilers are proposed with stacks of height 35 mtrs & 30 mtrs. Cyclone separators and bag filters will be installed separately for each of the boiler for controlling the particulate emissions (within statutory limit of 115 mg/ Nm³).

Details of Process emissions generation and its management.

S. No.	Name of the Gas	Quantity in Kg/Day	Treatment Method
1	Carbon dioxide	1776.00	Dispersed into the atmosphere
2	Hydrogen	125.00	Diffused by using Nitrogen through Flame arrestor
3	Ammonia	135.00	Scrubbed by using chilled water media
4	Oxygen	236.00	Dispersed into the atmosphere
5	Hydrogen Bromide	605.00	Scrubbed by using C. S. Lye solution
6	Hydrogen chloride	1763.00	Scrubbed by using chilled water media
7	Sulphur dioxide	55.00	Scrubbed by using C. S. Lye solution
8	Propane	73.00	Diffused by using Nitrogen through Flame arrestor
9	Hydrogen fluoride	79.00	Scrubbed by using C. S. Lye solution
10	Dimethylamine	172.00	Scrubbed by using chilled water media

Details of Solid waste & Hazardous waste generation and its management:

S. No	Name of the Waste	Quantity	Disposal Method
Hazardous Waste Details			
1	Organic solid waste (Process Residue)	9108 Kg/Day	Will be sent to Cement Industries
2	Spent Carbon	429 Kg/Day	
3	Solvent Distillation Residue	2668 Kg/Day	

4	Organic distillate from MEE Stripper	2350 Kg/Day	
5	Inorganic Solid Waste	7623 Kg/Day	Will be sent to TSDF
6	MEE Salts	4690 Kg/Day	
7	ETP Sludge	260 Kg/Day	
8	Used Oils	380 Ltrs/Annum	Will be sent to SPCB Authorized Agencies for Reprocessing/ Recycling
9	Detoxified Containers/ Container liners	900 No's / Month	After Detoxification will be sent to SPCB authorized agencies.
10	Used Lead Acid Batteries	6 No's/ Annum	Send back to suppliers for buyback of New Batteries
Solid waste details			
11	Ash from boilers	11900 Kg/Day	Will be sent to Brick Manufacturers

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR & EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the PFR & EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the PFR/EMP report reflects the present environmental concerns and the projected scenario for all the environmental components. The committee deliberated the action plan and budget allocation for green belt development, mitigation measure towards Air, Water, Noise and Soil pollution. The Committee has also deliberated on the activities/ action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material/products shall be undertaken with utmost precautions and following safety norms and best practices.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). Fugitive emissions shall be controlled at 99.98% with effective chillers. Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. Regular VOCs monitoring should be carried out.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iv). 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.
- (v). 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.
- (vi). 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.
- (vii). Total fresh water requirement shall not exceed 294.83 m³/day and will be met from Ground water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.
- (viii). 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.

- (ix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (x). 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 flame 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.
- (xi). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
- (xii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiv). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- (xv). A separate Environmental Management Cell (having qualified person 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.

Reconsideration of Environmental Clearance

Agenda No. 3.29

Setting up of Pesticides and Synthetic organic chemical manufacturing unit located, at Plot No. D-2/CH-51, GIDC Dahej –II, Village Dahej, Taluka Vagra, District Bharuch, Gujarat by M/s Jeevan Chemicals Pvt Ltd- Reconsideration of Environmental Clearance

[IA/GJ/IND2/114411/2019, IA-J-11011/255/2019-IA-II(I)]

The proposal was earlier considered by the EAC (Industry-2) in its meeting held on 15th September, 2020 through VC. The Committee has asked certain additional information and the reply submitted by the PP are as under:

S. No.	Information desired by the EAC	Information provided by the PP
(i)	<p>The Committee deliberated the issues and observed that Zero Liquid Discharge plan is not adequate for addressing the issues. The Committee observed that the PP/Consultant has not presented the adequate details on the Effluent treatment mechanism. The Committee suggested to revise the Effluent treatment mechanism with plan for Zero Liquid Discharge and submitted for further deliberations by the Committee.</p>	<ul style="list-style-type: none">• As per the direction of EAC we have revised Effluent treatment mechanism from CETP disposal to Zero Liquid Discharge.• Effluent treatment mechanism with plan for Zero Liquid Discharge is as under, <u>For Domestic Waste water:</u><ul style="list-style-type: none">➤ STP 3 KLD Capacity is proposed for treatment of domestic waste water and treated water will be reuse for greenbelt development which will further reduce fresh water consumption by 2.22 KLD.<u>For Industrial Waste water:</u><ul style="list-style-type: none">➤ There will be stream segregation at sources, accordingly low COD/TDS and high TDS/COD streams will be segregated.➤ High TDS/COD stream will be treated in MEE. Condensate from MEE will further treated in ETP having primary, secondary and tertiary treatment facility.➤ Low COD/TDS stream from boiler, cooling and washing will be treated in ETP along with MEE condensate.➤ Treated effluent will further pass through RO plant. RO reject will be treated in MEE, while RO permeate will reuse in industrial activities.➤ No treated effluent will be discharge outside the plant premises and plant will work on Zero Liquid Discharge system.
(ii)	<p>The Committee observed that the</p>	<ul style="list-style-type: none">• As per the direction of EAC we have revised water balance diagram which covers water consumption and wastewater

	PP/Consultant has not presented the adequate details on the water balance. The Committee suggested to resubmit the same as per ZLD plan for further deliberations by the Committee. Plan for storage of rain water harvesting in two tanks (60 KL each).	<p>generation stream along with reuse of treated effluent.</p> <ul style="list-style-type: none"> • Following are the summary of revised WBD, <table border="1"> <thead> <tr> <th>Description</th> <th>Quantity of water as per earlier proposal</th> <th>Quantity of water as per Revised WBD</th> </tr> </thead> <tbody> <tr> <td>Total Water Requirement</td> <td>47.60 KLD</td> <td>47.60 KLD</td> </tr> <tr> <td>Treated water reuse</td> <td>0</td> <td>29.03 KLD</td> </tr> <tr> <td>Fresh water requirement</td> <td>47.60 KLD</td> <td>18.57 KLD</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Fresh water requirement will be reduce about 61% and now it will be 18.57 KLD only due to ZLD proposal. 	Description	Quantity of water as per earlier proposal	Quantity of water as per Revised WBD	Total Water Requirement	47.60 KLD	47.60 KLD	Treated water reuse	0	29.03 KLD	Fresh water requirement	47.60 KLD	18.57 KLD
Description	Quantity of water as per earlier proposal	Quantity of water as per Revised WBD												
Total Water Requirement	47.60 KLD	47.60 KLD												
Treated water reuse	0	29.03 KLD												
Fresh water requirement	47.60 KLD	18.57 KLD												
(iii)	Rain water harvesting plan with Two storage tank of capacity 60 KLD each need to be submitted and presented in the next Committee.	<ul style="list-style-type: none"> • We have proposed two water storage tanks of capacity 100 KL each for storage of harvested rain water. • Roof top area and paved area along with average rain fall and rainy days of Dahej is considered for potential of rain water harvesting. Detail of rain water harvesting is incorporated in EIA report. 												

The Project Proponent and the accredited Consultant M/s En-Vision Enviro Technologies Pvt Ltd, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Pesticide, Synthetic Organic Chemicals and Intermediates Manufacturing Unit of capacity 2350 TPA at Plot No. D-2/CH-51, GIDC Dahej – II, Village - Dahej, Taluka - Vagra, District Bharuch, Gujarat by M/s Jeevan Chemicals Pvt Ltd.

The details of products and capacity as under:

S. No.	Name of Products	Quantity (TPA)
PESTICIDE PRODUCTS		
1	Metribuzin	50
2	Tebuconazole	50
3	Paclobutrazole	50
4	Hexaconazole	50
5	Pendimethalin	50

6	Propiconazole	50
7	Sodium-N-Methyl-N-Oleyl-Taurate	50
8	Diafenoconazole	50
9	Diafenthiuron	50
10	4-Hydroxyacetophenone & 2-Hydroxyacetophenone	50
11	[4- Amino-6-Tert-Butyl-3-Mercapto-1, 2, 4-Triazin-5(4H)]- One Triazinone	50
SYNTHETIC ORGANIC PRODUCTS		
12	2-Ethyl Hexyl Glyceryl Ether	150
13	1,2-Hexanediol	400
14	1,2-Octanediol	150
15	1,2-Dodecanediol	50
16	1,2-Decanediol	50
INTERMEDIATES FOR PESTICIDE AND SYNTHETIC ORGANIC CHEMICALS		
17	2-Cyanophenol	50
18	4-Cyanophenol	50
19	Phenyl Glycidyl Ether	50
20	O-Cresyl Glycidyl Ether	50
21	Butyl Glycidyl Ether	50
22	Poly Glycerol Glycidyl Ether	50
23	Poly Glycol Ethylene (PGE) Di Glycidyl Ether	50
24	Iso Propyl Alcohol (IPA) Glycidyl Glycidyl Ether	50
25	Tetra Methyl Bis Phenol F (TMBP F)	50
26	Tetra Methyl Bis Phenol A (TMBP A)	50
27	Tetra Methyl Bis Phenol (TMBP)	50
28	2,4- Dihydroxybenzophenone	50
29	Benzophenone-3	50
30	Benzophenone-4	50
31	Allyl Glycidyl Ether	50
32	Bisphenol-F	50
33	Bisphenol-S	50
34	1,2-Pentanediol & 1,5-Pentanediol	50
35	Propiophenone & Diethyl Ketone	50
36	Pinacolone	50
	TOTAL	2350

The project/activities are covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates' and 5(f) 'Synthetic organic chemicals industry' of the Schedule

to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The standard ToR has been issued by Ministry vide letter dated 20/09/2019. Public Hearing exempted as the project site is located in the notified Industrial area. It is informed that no litigation is pending against the proposal.

Total land area available for the project is 19,453.58 m². Industry will develop greenbelt in an area of 33.41% i.e. 6,500 m² out of the total area of the project. The estimated project cost is Rs 18.75 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs 1 Cr. and the Recurring cost (operation and maintenance) will be about Rs 96 Lacs per annum. Total Employment will be 55 Persons as direct & 10-15 persons indirectly. Industry proposes to allocate Rs 37.50 Lacs towards Corporate Environmental Responsibility.

There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Narmada is flowing at a distance of 3.97km in South direction.

Ambient air quality monitoring was carried out at 8 locations during March, 2019 to May, 2019 and the baseline data indicates the ranges of concentrations as: PM₁₀ (66 – 98 µg/m³), PM_{2.5} (22 - 50 µg/m³), SO₂ (10.6 - 25.0 µg/m³) and NO₂ (13.6 – 30.0 µg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.408 µg/m³, 2.13µg/m³ and 0.78 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 47.60 m³/day of which fresh water requirement of 18.57 m³/day will be met from GIDC, Dahej. Effluent of 33.33 KLD quantity (Industrial) will be treated in MEE and ETP having primary, secondary and tertiary treatment facility followed by RO plant. After primary treatment of effluent stream of utility, it will be mixed with MEE condensate and treated in ETP having secondary and tertiary treatment facility followed by RO plant. RO reject will be further treated in MEE, while RO permeate will be reuse in industrial activities. Effluent of 2.20 KLD quantity (Domestic) will be treated in Sewage treatment plant and treated water will be reused for green belt development within premises. The plant will be based on Zero Liquid discharge system.

Power requirement will be 525 kVA will be met from supplied by Dakshin Gujarat Vij Company Limited (DGVCL). 500 kVA DG set is used as standby during power failure. Stack (height – 11 m) will be provided as per CPCB norms to the proposed DG set. Proposed unit has 0.8 TPH (4 Nos.) Natural gas fired boilers and 20 Lac kcal/hr x 2 Nos. and 10 Lac kcal/hr x 2 Nos. of Natural gas fired Thermopacks. Adequate stack Height for proper dispersion of pollutant with a stack of height of 30 m (one common stack between two boilers – Total 2 stacks of 30 m for boilers and one common stack between two Thermopacks – Total 2 stacks of 30 m for Thermopacks) will

be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers.

Details of Process emissions generation and its management is as under:

Stack No.	Stack attached to	Vent Height (mtr.)	Vent Diameter (mtr.)	Pollutant	Pollution Control Equipment	Permissible limit
1	2-Cyanophenol	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
2	4-Cyanophenol	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
3	4-Benzophenone	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
4	Paclobutrazole	15	0.4	Hydrobromic Acid	Two stage Water Scrubber	20 mg/Nm ³
5	Hexaconazole	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
6	Hexaconazole	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
7	Pendimethalin	15	0.4	Nitrogen Dioxide	Two stage Caustic Scrubber	< 50 ppm
8	Propiconazole	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
9	Propiconazole	15	0.4	Hydrobromic Acid	Two stage Water Scrubber	5 mg/Nm ³
10	Diafenoconazole	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
11	Diafenoconazole	15	0.4	Hydrobromic Acid	Two stage Water Scrubber	5 mg/Nm ³

12	4-Hydroxyacetophenone	15	0.4	Hydrochloric Acid	Two stage Caustic Scrubber	20 mg/Nm ³
13	Diafenthuron	15	0.4	Ammonia	Two stage Water Scrubber	30 mg/Nm ³

Details of Solid waste/ Hazardous waste generation and its management is as under:

S. No.	Name of Hazardous Waste	Source	Haz. Waste Category for Schedule – I waste	Quantity (TPA)	Mode of storage, treatment, transportation & disposal
1	ETP Sludge	From primary treatment of effluent	35.3	5.75	Collection, Storage, Transportation and Disposal at TSDF site for land filling.
2	MEE salt	From MEE	37.3	2319.75	Collection, Storage, Transportation and Disposal at TSDF site for land filling.
3	Organic Residue	Manufacturing Process like 2-Ethyl Hexyl Glyceryl Ether; 2-Cyanophenol; 4-Cyanophenol; Phenyl Glycidyl Ether; O-cresyl Glycidyl Ether; Butyl Glycidyl Ether; Poly Glycerol Glycidyl Ether; PGE DI Glycidyl Ether etc.	29.1	283.60	Collection, Storage, Transportation and sent for co-processing or Disposal at common incinerator facility for incineration.
4	Distillation Residue	Manufacturing Process of Pendimethalein	20.3	12.90	Collection, Storage, Transportation and sent for co-processing or Disposal at common incinerator

					facility for incineration.
5	Used/ Spent Oil	From plant and Machineries	5.1	6.00	Collection, Storage, Transportation & Disposal by selling to registered re-processors.
6	Spent Catalyst	From manufacturing Process	29.5	95.62	Collection, Storage, Transportation & Disposal at TSDF site for land filling.
7	Discarded Containers	From Raw Materials and product packing	33.1	5000 nos./annum	Collection, Storage, Decontamination & Detoxification, Disposal to authorized recycler
8	Sludge from wet scrubber	From Scrubbers attached with reactors	37.1	15.00	Collection, Storage, Transportation and Disposal at TSDF site for land filling.
9	Spent Carbon or filter medium	From Process	36.2	2.40	Collection, Storage, Transportation & Disposal by selling to Registered Preprocessors
10	Date expired and off specification pesticides	From rejection by Customer	29.3	2.00	Collection, Storage, Transportation and Disposal at TSDF site for land filling.
11	Spent Acid	From manufacturing Process of 1,2-Pentenediol; 1,2-Hexanediol; 1,2-Octanediol; 1,2-Dodecanediol; 1,2-Decanediol; Pendimethalein	29.6	758.70	Collection, storage, Transportation and disposal by sell to registered party having Rule – 9 permission under the HW Rules – 2016.
12	48% HBr solution	From manufacturing Process of	29.1	157.80	Collection, storage, Transportation and disposal by selling

	(process waste)	Paclobutrazole; Hexaconazole; Pendimethalein; Propiconazole; N- Oleyl Taurate; Diafenoconazole			to registered party having Rule – 9 permission under the HW Rules – 2016.
13	22% Ammonia Solution (process waste)	From manufacturing Process of Diafenthuron	29.1	10.25	Collection, storage, Transportation and disposal by sell to registered party having Rule – 9 permission under the HW Rules – 2016.
14.	STP Sludge	STP	-	0.1	Collection, storage and used as manure in green belt within premises.

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The Committee

has noted that the Industry proposed Rs. 2.4 lakhs towards Conservation Plan for Schedule-I species.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture in the project area.
- (iii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (iv). 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.

- (v). 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.
- (vi). 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.
- (vii). Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (viii). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (ix). 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 flame 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.
- (x). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi). Total fresh water requirement shall not exceed 18.57 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xii). 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.
- (xiii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.

- (xiv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.
- (xv). As proposed, Industry shall allocate Rs. 2.4 lakhs towards Conservation Plan for Schedule-I species in consultation with State Forest/Wildlife Department.
- (xvi). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvii). A separate Environmental Management Cell (having qualified person 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.

Agenda No. 3.30

Establishing Manufacturing Unit of Pesticides & intermediates and Synthetic Organic Chemicals & intermediates unit Capacity 20100 TPA by M/s Shivalik Rasayan Limited located at D – 3/ 16 GIDC Industrial Estate Dahej – III, Village-Sambheti, Taluka – Vagra, Distt- Bharuch, Gujarat -Reconsideration of Environment Clearance.

[IA/GJ/IND2/152048/2020, IA-J-11011/111/2020-IA-II(I)]

The proposal was earlier considered by the EAC (Industry-2) in its meeting held during 24th November, 2020. The information desired by the Committee and response of the PP are as under:

S.No.	Information desired by the EAC	Information provided by the PP
1	To submit Process safety/3-D Modelling Plan	3-D Modelling Plan has been submitted
2	Banned pesticides shall not be utilized	It is assured that, banned pesticides shall not be manufactured.
3	Coal as fuel shall not be utilized	Coal shall not be used as fuel in the utilities. It is decided to use Natural Gas as fuel in place of Coal in utilities.

4	Natural gas shall be utilized as fuel	Coal shall not be used as fuel in the utilities. It is decided to use Natural Gas as fuel in place of Coal in utilities.
5	Plan of Solar energy utilization	<p>For energy conservation, unit has proposed to install solar panel within plant premises.</p> <p>For proposed project, total power requirement will be 1500 KVA which will be procured from DGVCL.</p> <p>Unit has proposed to generate 15% (i.e 1500 x 15% = 225 KVA) of the total power requirement through solar system on progressive basis (starting from 10%) which will be installed within plant premises and it will be used for plant operation, building lighting and street lighting.</p>
6	Roof top Rain water harvesting plan to be submitted as plot area is large	<p>Unit has proposed to install roof top rain water harvesting system within plant premises to prevent runoff and reduce fresh water consumption.</p> <p>Storm water from the roof top shall be channelized through pipes to the storage tank constructed for collection of rain water in the premises and water shall be used for various industrial activities / firefighting etc. in the unit.</p> <p>Detailed rain water collection and storage plan is submitted.</p>
7	To submit Detailed Liquid Discharge Plan	<p>For the purpose of water conservation and reduce fresh water requirement for the proposed project, unit has proposed to reuse the maximum treated water within plant premises. Unit has proposed to install in-house ETP, MEE, RO and STP.</p> <p>Revised details of water consumption, wastewater generation, recycle water and water balance diagram are submitted.</p>
8	Hazardous material shall not be stored	<p>To reduce the risk hazard, there shall be minimum storage of hazardous materials at site. Our most of the solvents tanks will be underground with proper safety and precaution in compliance of Explosive Norms. Accordingly, on-site and off-site emergency plan have been prepared.</p> <p>Underground storage tanks will be constructed of Steel material and they will be double-wall construction. Also</p>

		Leak Detection & Repair (LDAR) program shall be implemented
9	Treated water shall be reused and RO discharge water shall be used/supplied for agriculture purposes	For the purpose of water conservation and reduce fresh water requirement for the proposed project, unit has decided to reuse the maximum treated water within plant premises. Unit has proposed to install in-house ETP, MEE, RO and STP.
10	Solvent recovery CTP plan is to be submitted	The solvent distillation will be carried out to recover the solvent. Recovered solvents shall be again reused in the process and distillation residue generated will be disposed for co-processing. To achieve maximum solvent recovery i.e up to 99%, two stage condensers will be installed using chilled water / brine solution as cooling media. The condensers shall be provided with sufficient Heat Transfer Area and residence time to achieve maximum recovery.

The Project Proponent and the accredited Consultant M/s Eco Chem Sales & Services, made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for Setting up Pesticides & Intermediates and Synthetic Organic Chemicals & Intermediate manufacturing unit of capacity 20100 TPA at D – 3/16 GIDC Industrial Estate Dahej –III, Village – Sambheti, Taluka – Vagra, District Bharuch, Gujarat by M/s Shivalik Rasayan Limited.

The details of products and capacity as under:

S. No.	Product	CAS No.	Capacity (TPA)
A	Pesticides		12000
1.	Dimethoate Technical	60-51-5	
2.	Malathion Technical	121-75-5	
3.	Acetamiprid Technical	135410-20-7	
4.	Thiamethoxam Technical	153719-23-4	
5.	Thiacloprid Technical	111988-49-9	
6.	Chlorfluazuron Technical	71422-67-8	
7.	Cyantraniliprole Technical	736994-63-1	
8.	Triclopyr Technical	57213-69-1	
9.	Triclopyrbutoxy ethyl ester	64700-56-7	
10.	Clodinafop Propargyl	105512-06-9	

11.	Azoxystrobin Technical	131860-33-8	
12.	Difanoconazole	119446-68-3	
13.	Epoxiconazole	133855-98-8	
14.	Hexaconazole	79983-71-4	
15.	Propiconazole	60207-90-1	
16.	Prothioconazole	178928-70-6	
17.	Pretilachlor	51218-49-6	
18.	Pendimethalin	40487-42-1	
19.	Atrazine	1912-24-9	
20.	Metribuzin	21087-64-9	
21.	Tricyclazole	41814-78-2	
22.	Tebuconazole	107534-96-3	
23.	Fipronil	120068-37-3	
24.	Emamectin Benzoate Technical	155569-91-8	
25.	Abamectin Banzoate Technical	71751-41-2	
26.	Spinosad	131929-60-7	
27.	Indoxacarb	144171-61-9	
28.	Propargite	2312-35-8	
29.	Paraquat	1910-42-5	
30.	Amitraz	33089-61-1	
31.	Intermediates	-	
B	Synthetic Organic Chemical		8000
B1	Speciality Chemicals		
1.	Methyl cis-1-[2-(2,5-Dimethyl phenyl)-Acetyl amino]-4-Methoxy-Cyclohexane (ETMD)	203313-47-7	
2.	1,1,1,3,3,3-Hexafluoro Isopropyl Methyl Ether (HFMOP)	13171-18-1	
3.	2,2-Dimethyl-4-Methylene-1,3-Dioxalane (MDO)	19358-05-5	
4.	Chloromethyl 2-Methyl Proponoate (CMIBA)	61644-18-6	
5.	2-Chloro-4-(Methyl sulfonyl)-3-[(2,2,2-trifluoro ethoxy)methyl] Benzoic Acid (CMTB)	120100-77-8	
B2	Performance Chemicals		
1.	1-(4-Chlorophenyl)-2-methyl-2-(morpholin-4-yl) propan-1-one (PCBM)	88324-57-6	
2.	Titanium Biscatecholate Monopyrogallate Sodium Potassium Salt (Negolyte)	1550156-02-9	
B3	Intermediates	-	

C	New R&D Products for Pilot Scale	-	100
Total		--	20100

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

The standard ToR has been issued by Ministry vide letter dated 1st June 2020. Public Hearing exempted as the project site is located in the notified Industrial area. It is informed that no litigation is pending against the proposal.

The land available for the project is 49244.70 m². Industry will develop greenbelt in an area of 33.24 % i.e. 16370.15 m² out of total area of the project. The estimated project cost is Rs. 70 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 660 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 900 Lakhs per annum. Total Employment will be 350 persons as direct & 180 persons indirect. Industry proposes to allocate Rs. 140 Lakhs towards Corporate Environment Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Narmada is flowing at a distance of 8.60 km in South direction.

Ambient air quality monitoring was carried out at 8 locations during 1st December 2019 to 29th February 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (64.6 – 86.1 µg/m³), PM_{2.5} (29.6 – 46.0 µg/m³), SO₂ (8.6 – 15.9 µg/m³) and NO_x (13.1 – 20.5 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 3.68 µg/m³, 6.26 µg/m³ and 3.07 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 1308.10 KLD, which includes fresh water requirement of 756.10 KLD, proposed to be met from GIDC, Dahej. Recycled water will be 552 KLD. Effluent (industrial) of 631.10 KLD quantity will be segregated into two different streams i.e. High TDS/COD stream and Low TDS/COD stream. High TDS/COD stream generated from process shall be collected separately and sent to MEE followed by stripper. The Condensate from MEE will be collected in collection sump and pumped to ETP. Low TDS/COD stream generated from utilities blow downs, process, washings will be treated into ETP consisting of Primary treatment, Two Stage Secondary Treatment and Tertiary Treatment. ETP treated water will be sent to RO plant. RO permeate will be reused for industrial purpose within premises and RO reject will be sent to MEE. Thus, unit will maintain Zero Liquid Discharge (ZLD).

Power requirement for the proposed project will be 1500 KVA and will be met from GSPC. Unit has proposed 02 DG sets of 500 KVA capacity each will be installed. DG sets will be used as standby during power failure. Stack (height 11.0 m) will be provided as per CPCB norms to the proposed DG sets.

The unit shall have 4 TPH and 10 TPH boilers. Multi cyclone separator, water scrubber with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boiler.

There will be generation of HCl, H₂S, HBr, Br₂ and SO₂ from the manufacturing process. Two stage alkali scrubber and height of 10 m chimney will be provided.

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

Sr. No.	Process waste	Category	Quantity, TPA	Mode of disposal
1	ETP Sludge	35.3 (Sch. I)	100	Collection, Storage, Transportation and Disposal to TSD site of M/s BEIL for landfilling
2	Distillation Residue/Organic Residue	29.1 (Sch. I)	6000	Collection, Storage, Transportation and Disposal to CHWIF for Incineration / Co-processing
3	Discarded Drums/Barrels	33.1 (Sch. I)	200	Collection, Storage, Transportation and Disposal to authorized decontamination facility
4	Used Oil	5.1 (Sch. I)	250	Collection, Storage, Transportation and Disposal by selling to authorized recycler
5	Spent Solvent	29.4 (Sch. I)	2800	Collection, Storage, Transportation and Disposal to authorized Recycler / Incineration.
6	Aqueous waste Containing trace pesticide from Reactor washing, drum washing etc.	29.2 (Sch. I)	4000	Collection, Storage, Transportation and Disposal to CHWIF of M/s BEIL for Incineration

7	Spent Resin From DM Plant	35.2 (Sch. I)	14	Collection, Storage, Transportation and Disposal to CHWIF of M/s BEIL for Incineration
8	Date-expired/ Off-Specification Products	29.3 (Sch. I)	100	Collection, Storage, Transportation and Disposal to CHWIF of M/s BEIL for Incineration
9	MEE Salt	35.3 (Sch. I)	2500	Collection, Storage, Transportation and Disposal to TSDf site of M/s BEIL for landfilling
10	Spent Carbon	36.2 (Sch. I)	30	Collection, Storage, Transportation and Disposal to CHWIF of M/s BEIL for Incineration
11	NaSH	C2 (Sch. II)	3000	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
12	HCl	C2 (Sch. II)	4000	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
13	Acetic Acid	C2 (Sch. II)	400	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
14	Distilled Solvent	-	2500	Collection, Storage and reuse within premises
15	NaCl	C2 (Sch. II)	1200	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
16	NaBr	C2 (Sch. II)	20000	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
17	HBr	C2 (Sch. II)	300	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission

18	Ammonium chloride	C2 (Sch. II)	150	Collection, Storage, Transportation and Disposal to authorized end user under Rule-9 permission
Solid Waste				
1.	Fly Ash	-	1960	Collection, Storage, Transportation and Disposal to brick manufacturer / cement industry
2.	STP Sludge	-	5	Used as a manure within plant premises

Deliberations in the EAC:

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. The Committee has noted that the Industry proposed Rs. 1.50 lakhs towards Conservation Plan for Schedule-I species.

The EAC has deliberated the proposal and has made 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 have found the proposal in order and have recommended for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

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

- (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). No banned pesticides shall be manufactured.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture in the project area.
- (iv). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (v). 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.
- (vi). 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.
- (vii). 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.

- (viii). Action plan and mitigation measures developed for safety and risk management shall be properly implemented.
- (ix). 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.
- (x). 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 flame 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.
- (xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xii). Total fresh water requirement shall not exceed 756.1 cum/day proposed to be met from GIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xiii). 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.
- (xiv). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of highpressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. PP shall start plantation immediately, as committed.

- (xvi). As proposed, Industry shall allocate Rs. 1.5 lakhs towards Conservation Plan for Schedule-I species in consultation with State Forest/Wildlife Department.
- (xvii). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xviii). A separate Environmental Management Cell (having qualified person 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.

The meeting ended with thanks to the Chair.

GENERAL CONDITIONS

- (i) 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.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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).
- (iv) 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.
- (v) 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.
- (vi) A copy of the clearance letter shall be sent by the project proponent 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.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective 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.
- (viii) 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 Regional Offices of MoEF&CC by e-mail.

- (ix) The project proponent 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.
- (x) 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.
- (xi) 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 during Video Conferencing (VC) meeting

S. No.	Name of Members	Designation
1.	Dr. Rajashekar P. Mandi Director, School of Electrical & Electronics Engineering, REVA University, Bangalore - 64 E-mail: rajashekarmandi@yahoo.com	Chairman
2.	Dr. Ashok Kumar Saxena, IFS Bungalow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	Prof. (Dr.) A.B. Pandit Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	Member
4.	Prof. (Dr.) S. N. Upadhyay Research Professor (Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail:snupadhyay.che@iitbhu.ac.in	Member
5.	Prof. (Dr.) Suneet Dwivedi, Professor in K Banerjee Centre of Atmospheric and Ocean Studies, University of Allahabad, Allahabad - 02 Uttar Pradesh, E-mail:dwivedisuneet@rediffmail.com /suneetdwivedi@gmail.com	Member
6.	Prof. (Dr.) Arvind K. Nema Professor, Department of Civil Engineering Indian Institute of Technology, Delhi, Hauz Khas, New Delhi -110 016 Email: aknema@civil.iitd.ac.in / aknema@gmail.com	Member
7.	Shri Santosh Gondhalkar 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santhnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
8.	Prof. (Dr.) Pradeep Kumar Mishra Department of Chemical Engineering & Technology, Indian Institute of Technology (BHU) Varanasi,	Member

	Varanasi - 221005 Email: pkmishra.che@itbhu.ac.in / drpkm18@gmail.com	
9.	Prof. (Dr.) Vijay S. Moholkar Professor in Department of Chemical Engineering, Block-K (Academic complex), Room No. 111, Indira Institute of Technology Gawahati, Gawahati – 781039 E-mail: vmoholkar@iitg.ernet.in	Member
10.	Dr. Suresh Panwar House No.4, Gayateri Green Society, NH 58 Bypass,Kankerkhara, Meerut, Uttar Pradesh Email-spcppri@gmail.com	Member
11.	Shri Tukaram M Karne Nagpur, Maharashtra E-mail: tmkarne@gmail.com	Member
12.	Shri Dinabandhu Gouda Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, PariveshBhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member
13.	Dr. Uma Kapoor Regional Director, CGWA, 18/11, Jamnagar House, Mansingh Road, New Delhi E-mail: Uma-cgwb@nic.in	Member
14.	Dr. R. B. Lal , Scientist 'E'/Additional Director Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change Room No. V-304, Vayu Wing, Jor Bag Road, New Delhi-110003 Telefax: 011-24695362 E-mail: rb.lal@nic.in	Member Secretary
MoEFCC		
16	Dr. E.P. Nobi	Research Officer
17	Mr. Ritin Raj	Research Assistant

Approval of EAC Chairman

The screenshot shows an Outlook email interface. At the top, there is a search bar with 'in:inbox' and a magnifying glass icon. To the right, the name 'Additional D...r R B LAL' is visible. Below the search bar, there are buttons for 'Actions', 'Read More', and 'View'. The email title is 'Revised Draft Minutes of the 3rd EAC (Industry-3) meeting held during December' with '3 messages' indicated. The sender is 'From: rajashekarmandi@yahoo.com' and the recipient is 'To: Additional Director MoEFCC Dr R B LAL'. The date and time are 'January 8, 2021 2:50 PM'. The body of the email contains the text: 'Dear Dr. R. B. Lal, The draft is in order and is approved.' followed by a link 'Get Outlook for Android'.
