

ENVIRONMENTAL
CLEARANCE



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Factory Manager
ANAVEN LLP
At and PO. Atul, Dist. Valsad,,Valsad,Gujarat-396020

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/GJ/IND3/290050/2022 dated 07 Oct 2022. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--|---|
| 1. EC Identification No. | EC22A021GJ120716 |
| 2. File No. | J-11011/286/2018-IA-II(I) |
| 3. Project Type | Expansion7 |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk |
| 6. Name of Project | Expansion of Monochloro Acetic Acid (MCA) manufacturing unit |
| 7. Name of Company/Organization | ANAVEN LLP |
| 8. Location of Project | Gujarat |
| 9. TOR Date | N/A |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 03/12/2022

(e-signed)
Mr. Motipalli Ramesh
Scientist E
IA - (Industrial Projects - 3 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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PARIVESH

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F. No. J-11011/286/2018-IA-II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi - 110003

Dated: 2nd December, 2022

To

M/s. Anaven LLP
PO. Atul, Dist. Valsad, Gujarat-396020
Email: purvesh_shroff@atul.co.in

Subject: Proposed expansion of Monochloro Acetic Acid (MCA) Manufacturing Unit by increase in production capacity from 32,000 TPA to 48,000 TPA and co-product (Hcl) from 41,600 TPA to 62,400 TPA and HE-Di-Chloro and Tri-chloro acetic acid from 448 TPA to 672.00 TPA located at Plot No. 33/P1 (part of plot no. 33), Village Atul, Tehsil & District Valsad, Gujarat by M/s. Anaven LLP - Environmental Clearance

Sir,

This has reference to your proposal No. **IA/GJ/IND3/290050/2022**, on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Environmental Clearance for Proposed expansion of Monochloro Acetic Acid (MCA) Manufacturing Unit by increase in production capacity from 32,000 TPA to 48,000 TPA and co-product (Hcl) from 41,600 TPA to 62,400 TPA and HE-Di-Chloro and Tri-chloro acetic acid from 448 TPA to 672.00 TPA located at Plot No. 33/P1 (part of plot no. 33), Village Atul, Tehsil & District Valsad, Gujarat by M/s. Anaven LLP.

3. The project/activity is covered under Category 'A' of item 5(f), of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) and requires appraisal at Central Level by Expert Appraisal Committee (EAC). The project falls under clause 7(ii)(a), as per MoEF&CC notification S.O.3518 (E) dated 23.11.2016 and S.O. 980(E) dated 02.03.2021 & MoEF&CC OM Nos. IA3-22/10/2022-IA.III [E177258] dated 11.04.2022 & 30.05.2022.

4. The PP applied for the Environment Clearance on 30.8.2022 in Form-2 and submitted EIA/EMP Report and other documents. Due to some shortcomings, the Project was referred back to PP on 7.9.2022, 21.9.2022 and reply to the same was submitted by the PP on 10.9.2022, 7.10.2022. The PP in the Form-2 reported that it is an Expansion under para 7(ii). The proposal was placed in 40th EAC Meeting held on 18-19 October, 2022, wherein the PP and an accredited Consultant, Perfect Enviro Solutions Pvt. Ltd. [Accreditation number NABET/EIA/1922/SA 0143 Valid up to 26.11.2022], made a detailed presentation on the salient features of the project and informed the following:

5. The PP reported that the proposed land area is 0.66303 Ha and no R&R is involved in the Project. The details of products are as follows:

| S. No. | Products Name | Existing (TPA) | Phase I Expansion (TPA) 20% | | End Use of the Product | Hazardous/Non Hazardous & CAS No. | State | Transportation (by Road/Air/Sea) | Product Sale (Local/Export) |
|-----------------|------------------------|----------------|-----------------------------|-----------------|---|--|---|---|--|
| | | | Proposed | After Expansion | | | | | |
| Products | | | | | | | | | |
| 1. | Monochloro Acetic Acid | 32,000 | 6,400 | 38,400 | Agro (2,4-D and CAC), Pharma (Ibuprofen), CMC (Oilfield & Detergent) & Surfactants (Betaines) | Hazardous (Corrosive & Toxic) 79-11-18 | Solution flakes | Pipeline/Road (Truck) Road (Truck) | Domestic/Export |
| 2. | HCl acid | 41,600 | 8,320 | 49,920 | Chemical industries like Dyes, Agrochemicals, Pharmaceuticals etc. | Hazardous (Corrosive & Toxic), 7647-01-0 | HCl anhydrous is in Gaseous State & then it is converted to solution of HCl acid which is in Liquid State | Road (Truck)/Pipeline. Gas will be converted to Solution within the site to the max. extent possible. And then the solution will be transported via trucks and excess gas will be supplied to Atul via Above ground | <i>HCl acid will be used in house or sold (domestic/export)</i> |

| | | | | | | | | | |
|----|---|-----|----|-----|--|--------------------------------|--------|---|---|
| | | | | | | | | pipelines & will be used as per requirement | |
| 3. | HE-Di-Chloro and Tri-chloro acetic acid | 448 | 90 | 538 | Agrochemicals (herbicides) & cosmetics | Hazardous (Toxic) CAS No. - NA | Liquid | Road (Truck) | Sale (Domestic) or treatment in ETP (for biodegradation within the plant) |

6. The PP reported that there is no violation as per the EIA notification, 2006, no court case is pending against the proposal and no direction issued under E(P) Act/Air Act/Water Act.

7. The PP reported that the project site is not located within 10 km distance of national parks, sanctuaries, Biosphere Reserves, Migratory corridors of wild Animals River/ water body Par river is flowing at a distance of 0.40 km in SE direction. The PP reported that no forest area is involved in the proposed project. and two Schedule I species i.e. *Pavo cristatus*, *Panthera pardus* exist within 10 km study area of the project, for which conservation plan is submitted to Chief conservator of Forest on 146.2022 with budgetary provision of Rs. 4.07 Lakh for five years

8. The PP reported that Certified compliance vide file no. E- File No.- J- 11- 26/2022- IRONGR dated 22.06.2022 has been issued by RO, MoEF&CC. An action taken report has been submitted to Regional Officer, MoEF&CC, Gandhinagar, Gujarat for the partially complied points of the certified compliance report via email dated 06 August, 2022.

9. **Ambient air quality monitoring** was carried out at 8 locations during December 2022 to February 2022 and the baseline data indicates the ranges of concentrations as: PM₁₀ (72.6- 91.9 µg/m³), PM_{2.5} (42.5- 57.2 µg/m³), SO₂ (9.5-12.8 µg/m³), NO₂ (28.5 - 38.3 µg/m³) and CO (1.0 - 1.3 mg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.723 µg/m³, 0.638 µg/m³, 4.25 µg/m³, 2.38 µg/m³ and 0.003 mg/m³ with respect to PM₁₀, PM_{2.5}, SO₂, NO₂ and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). **The groundwater quality** was collected from 6 locations (Nearby site, Atul Plant area, J colony, Down Colony, Haria Village & Bhagod) during December 2022 to February 2022 and the baseline data indicates that the range of the Total Dissolved Solids (TDS) ranges from 270 mg/l to 625 mg/l, Total Hardness ranges from 156 mg/l to 272 mg/l, Alkalinity ranges from 104 mg/l to 296 mg/l, Calcium Concentration ranges from 33.6 mg/l to 65.6 mg/l, Chloride Concentration ranges from 39.7 mg/l to 85.08 mg/l. Thus it can be concluded that the water quality is well within the drinking water standard (IS:10500) except for total dissolved solids & alkalinity at J colony which is 625 mg/l & 296 mg/l and Total hardness at J colony & down colony which is 272 mg/l & 208 mg/l respectively. **The surface water quality** was collected from 5 locations (Par River Upstream, Par River Downstream, Lake near Pardi hariya, Chichwada talav & Water Body near Atul Plant Area) during December 2022 to February 2022 and the baseline data

indicates that the range were in compliance with the Class “B” i.e. Outdoor Bathing (Organised)- Designated Best Use Water Quality Criteria. **The ambient noise level monitoring** was carried out in 10 locations during December 2022 to February 2022. The ambient noise level during day time at the project site varies from 67.8 dB (A) to 68.9 dB (A) which are within the standard limit of Industrial area ~ 75 dB (A). During night the noise level at the project site ranges from 60.8 dB (A) to 62.6 dB (A) which are also within the standard limit of Industrial area 70.0 dB (A). In the Buffer Zone, noise levels at the day time range from 55.8 dB(A)-73.2 dB(A) and at night time it ranges from 45.2 dB (A) to 67.3 dB (A). The increased noise level is due to vehicular activity in the area & at NH 48. **Soil samples** was carried out at 8 locations during December 2022 to February 2022 and the baseline data indicates the ranges of concentrations of primary nutrients like Organic matter ranges from 0.59-1.3%, the available nitrogen ranges from 67.4 mg/kg- 126.4 mg/kg, available Potassium 28.4mg/kg - 61.6 mg/kg and the available Phosphorus ranges from 12.8 mg/kg- 24.6 mg/kg. Thus it can be concluded that soil is average fertile in the core Zone. Primary nutrient profile shows that soil is average fertile due to the availability of low amounts of nitrogen, available potassium.

10. The PP reported that Total Water Requirement after 20% expansion will be 583 KLD out of which fresh water requirement will be 290 KLD & treated water will be 293 KLD (243 KLD RO Permeate for reuse & 50 KLD MEE Condensate for reuse). Total water will be used for (domestic purposes (17 KLD), industrial processes (219 KLD), Cooling Tower (340 KLD), Washing (reactor and floor) (1 KLD) and Gardening (6 KLD). 94 KLD water from the cooling tower will be used in the scrubber After Phase I expansion, 303 KLD of total waste water will be generated which will be treated in ETP and includes 123 KLD of wastewater from industrial process, 1 KLD wastewater from washing, 68 KLD of cooling tower blowdown, 94 KLD wastewater from scrubber, and 16 KLD from Domestic activities which will be sent to septic tank followed by ETP for further treatment. ETP treated water will be sent to RO for further treatment. RO permeate (297 KLD) will be recycled back for reuse while 54 KLD RO reject will be sent to MEE. MEE condensate (50 KLD) will be reused while 4 KLD MEE concentrate will be sent to filtration through centrifuge and salt generated will be sent to TSDF. No treated water will be discharged outside the premises; hence it will be a ZLD unit.

11. The PP reported that Power requirement after expansion will be 1302 KW including existing 1087 kW and will be met from Dakshin Gujarat Vij Company Limited (DGVCL)). Existing unit has a 1 x 500 kVA DG set. Additionally, no DG sets will be used as standby during power failure. Stack height of 10 m is provided as per CPCB norms to existing DG sets. There is no boiler installed in the unit premises, steam of 48360 TPA will be taken from Boiler of Atul, steam shall be transported in Above Ground pipeline of length 120 cm, and Dia 10 cm, pressure 19 bar & temp 211 deg. C.

12. Details of Process emissions generation and its management:

| S. No | Name of Stack | Pollution Control Measure | Height in Mtr | Stack dia. | Parameter |
|-------|-------------------------|--|---------------|------------|---------------|
| 1 | Chlorinator (STACK02) | Scrubber connected to HCl absorption scrubber (TA 901), chlorine destruction unit (TA 903, 905) via scrubber to column 912 and discharge to WWTP Media- Water followed by Caustic | 35 | 0.15 | HCl, Cl |
| 2 | Hydrogenat or (STACK03) | Column 717 (scrubber) overhead is connected to TA 720 where outlet gas introduced via sparger dipped in water (discharged to WWTP) Media- Water | 35 | 0.10 | Hydrogen+ HCl |

| | | | | | |
|---|------------------------------------|--|----|------|-----------------------|
| 3 | vacuum pump (STACK04) | Stack is connected to TA-440 where gas(air)-liquid from vacuum pump discharge separates and liquid overflows to WWTP. Vacuum pump is connected to CO-441 and CO-415 scrubbers in the upstream. Media- Water | 38 | 0.10 | HCl |
| 4 | Flakers (STACK05) | Scrubber (CO-507) connected to vent of flaker scrubber (CO-527 and CO-537) Media- Water | 45 | 0.50 | Traces of HCl |
| 5 | HCl Storage tank (STACK06) | Scrubber Media- Water | 18 | 0.20 | Traces of HCl |
| 6 | Acetic acid storage tank (STACK07) | Scrubber Media- Water | 15 | 0.10 | Traces of Acetic acid |

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

| SOLID WASTE MANAGEMENT | | | | | |
|---|----------|----------|-------------------------------|-----------------|------------------------------|
| Category | Unit | Existing | Phase-I (After 20% Expansion) | | Disposal/Treatment Method |
| | | | Proposed | After Expansion | |
| Biodegradable | (Kg/day) | 3 | 0 | 3 | Given to local vendor |
| Recyclable Waste (Plastic, paper, wood, glass, etc) | (Kg/day) | 9 | 1 | 10 | Given to authorised recycler |
| | (Kg/day) | 12 | 1 | 13 | - |

| Waste | Category (as per HWM Rules,2016) | Unit | Existing | Phase-I (20% Expansion) | | Disposal |
|--------------------------------------|----------------------------------|----------------|----------|-------------------------|-----------------|--|
| | | | | Proposed | After Expansion | |
| ETP Sludge from Wastewater Treatment | 35.300 | Tons per annum | 1,120 | - | 1,067 | TSDF of Atul Ltd. and common facility approved by GPCB i.e. Detox India (Safe Enviro Pvt. Ltd.) (Agreement with TSDF of Atul ltd. has been done & membership has been taken for disposal at common facility of Detox |
| Salt from MEE | 35.300 | Tons per annum | 1551 | - | 1,450 | |

| | | | | | | |
|---|--------|----------------|------|------|------|--|
| | | | | | | India) |
| Liners & used containers from Packaging | 33.100 | Tons per annum | 3.14 | 0.63 | 3.76 | Decontaminate and discard to authorised vendor |
| Used Oil from DG Sets, Gear boxes | 5.100 | KL per annum | 6.27 | 0.50 | 6.78 | Disposal to authorised vendor |
| Spent Catalyst from Process | 17.200 | Tons per annum | 0.96 | 0.54 | 1.5 | Sent to regenerator |

14. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 23.79 Crore (capital) and the Recurring cost (operation and maintenance) will be about ₹ 7.29 Crore per annum. The industry proposes to allocate ₹ 6 Lakhs towards CER for renovation of primary school & distribution of stationery items at primary school & provision of library, drinking water facilities, sanitation, Provision of solar light in the village.

15. Industry has already developed greenbelt in an area of 647 m², i.e. 9.8%, within the plant premises and 1594 m² i.e. 24% has been developed outside the plant premises within Atul village. Total 33.8 % of the project area has been developed as the green area with a tree density of 1100 trees per hectare (3x3 m spacing).

16. The PP proposed to set up an Environment Management Cell (EMC) consisting of General manager- HSE manager- Maintenance manager for the functioning of EMC.

17. The PP submitted the onsite and offsite disaster management plans in the EIA report.

18. The estimated project cost is Rs. 194.70 crores including existing investment of Rs. 187.5 crores. Total Employment will be 127 persons as direct & indirect after expansion

19. The proposal was considered by the Expert Appraisal Committee (Industry-3 sector) in its 40th meetings held during 18-19 October, 2022 in the Ministry through video conferencing, wherein the PP and their accredited Consultant, M/s. Perfact Enviro Solutions Pvt. Ltd. [Accreditation number NABET/EIA/1922/SA 0143 Valid up to 26.11.2022, made a detailed presentation on the salient features of the project. The minutes of the meeting are available on PARIVESH.

The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the density of greenbelt developed by the Unit i.e. 1100 trees per hectare (3x3 m spacing) vs. the current norm of 2500 trees per hectare (2x2 m spacing). The PP submitted an undertaking that they will plant 140 trees within the plant area and 266 trees within the close vicinity of the Plant, considering 70% survival rate within 7 days to comply with the current norms.

The PP will not commence any activity or production for 20% expansion until & unless the committed

green area density is achieved. The PP also submitted the drone imagery & videography of the green area development progress complying the current norms of plantation.

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

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

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

20. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), Ministry of Environment, Forest and Climate change hereby accords Environmental clearance to the project for proposed expansion of Monochloro Acetic Acid (MCA) Manufacturing Unit by increase in production capacity from 32,000 TPA to 48,000 TPA and co-product (Hcl) from 41,600 TPA to 62,400 TPA and HE-Di-Chloro and Tri-chloro acetic acid from 448 TPA to 672.00 TPA located at Plot No. 33/P1 (part of plot no. 33), Village Atul, Tehsil & District Valsad, Gujarat by M/s. Anaven LLP. under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

A. Specific Conditions:

- (i) The PP shall develop Greenbelt over an area of at least 647 m² by planting 140 trees inside the plant area and another 266 trees in close vicinity of plant. The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2m). The budget earmarked for the plantation shall be ₹ 2 Lakh and shall be kept in a separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (ii) A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. The PP shall engage General manager- HSE manager- Maintenance manager. In addition, one safety & health officer as per the qualification given in Factories Act, 1948 shall be engaged within a month of grant of EC. The PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every

year for the activities carried out during the previous year.

- (iii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. The budget proposed under EMP is ₹ 23.79 Lakh (Capital cost) and ₹ 7.29 Crore (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (iv) As committed by the PP, Industry shall not commence any activity or production for 20% expansion until & unless the committed green area density is achieved.
- (v) Total water requirement is 583 m³/day of which fresh water requirement of 290 m³/day will be met from Surface Water (Par River). The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawal only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year
- (vi) No banned chemicals shall be manufactured by the PP. No banned raw materials shall be used in the unit. The PP shall adhere to the notifications/guidelines of the Government in this regard.
- (vii) The PP shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (viii) The project proponent shall comply with the environment norms for Organic Chemical Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608(E), dated 21.07.2010 under the provisions of the Environment (Protection) Rules, 1986.
- (ix) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.
- (x) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (xi) As committed by the PP, zero liquid discharge shall be ensured, Effluent of 303 m³/day quantity will be treated through ETP, MEE and RO
- (xii) The PP shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (xiii) Continuous online (24x7) monitoring system for stack emissions shall be installed for

measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xiv) 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.
- (xv) The occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xvi) Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (xvii) The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xviii) The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be 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.
- (xix) The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xx) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

B. 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 Project proponent shall strictly comply with the rules and guidelines issued under the

Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.

- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) 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).
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.
- (x) 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.
- (xi) 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.

- (xii) 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.

21. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

22. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

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

24. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

This issues with approval of the competent authority.

(Dr. Motipalli Ramesh)
Scientist 'E'

Copy to: -

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010 (Gujarat)
2. Deputy Director General of Forests (C) Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A-Wing – 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar - 382010
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, District Valsad, Gujarat.
7. Guard File/Monitoring File/Website/Record File/Parivesh portal

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