



File No: SEAC/HR/2024/031

Government of India

Ministry of Environment, Forest and Climate

Change

(Issued by the State Environment Impact
Assessment Authority(SEIAA), HARYANA)



Date 07/06/2024



To,

ALCHEM INTERNATIONAL PVT LTD
201,Empire House,Mehrauli Gurgaon Road,Sultanpuri Dew Delhi , New delhi, SOUTH WEST,
DELHI, , 121004
sunil.malik@alcheminternational.com

Subject: Environment Clearance for Proposed Expansion Project for Manufacturing of Herbal Extracts and Their Purified Derivatives from existing capacity 95.670 TPA to 110.050 TPA at 25/2 Mathura Road, Village Kaili, Ballabgarh, Haryana, having plot area 89113.80 sq.m. (8.9 ha)

Sir/Madam,

This is in reference to the Proposal No. **SIA/HR/IND3/455233/2023 dated 10.01.2024** and subsequent letter dated 01.02.2024 and 27.05.2024 for obtaining Environmental Clearance under Category 5(f) of EIA Notification dated 14.09.2006 along with submission of **due Scrutiny fee (as applicable) of 2,00,000/- vide DD No.791390 dated 21.10.2023 & DD No. 004782 dated 27.10.2023 (in compliance of Haryana Government, Environment & Climate Change, Department Notification No. DE&CCH/3060 dated 14.10.2021)**. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A, Conceptual Plan, EIA/EMP report on the basis of approved TOR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MoEF& CC, GoI vide their Notification dated 21.02.2022, in its meeting held on 31.01.2024 and recommended to SEIAA for Grant of Environment Clearance.

2. The particulars of the proposal are as below :

| | |
|--|---|
| (i) EC Identification No. | EC23B2405HR5984920N |
| (ii) File No. | SEAC/HR/2024/031 |
| (iii) Clearance Type | Fresh EC |
| (iv) Category | B1 |
| (v) Project/Activity Included Schedule No. | 5(f) Synthetic organic chemicals industry |
| (vii) Name of Project | Proposed Expansion Project for Manufacturing of Herbal Extracts and Their Purified Derivatives from existing capacity 95670 TPA to 110050 TPA |

- (viii) Name of Company/Organization
 (ix) Location of Project (District, State)
 (x) Issuing Authority
 (xi) Applicability of General Conditions as per EIA Notification, 2006

at 25/2 Mathura Road, Village Kaili, Ballabgarh, Haryana, having plot area 89113.80 sq.m. (8.9 ha) by Alchem International Private Limited
 ALCHEM INTERNATIONAL PVT LTD
 FARIDABAD, HARYANA
 SEIAA
 No

3. It is inter-alia, noted that the project involves in the Environment Clearance for Proposed Expansion Project for Manufacturing of Herbal Extracts and Their Purified Derivatives from existing capacity 95.670 TPA to 110.050 TPA at 25/2 Mathura Road, Village Kaili, Ballabgarh, Haryana, having plot area 89113.80 sq.m. (8.9 ha).

4. The basic details of project are as under:

| S. No. | Particulars | As per Earlier EC | Achieved | Expansion | Total Area |
|--------|---|---|-------------------------------|--|--|
| 1. | Online Project Proposal Number | - | - | SIA/HR/IND3/455233/2023 dated: 10.01.2024 | |
| 2. | Latitude | 28 ⁰ 17'55.10" N | - | No change | No change |
| 3. | Longitude | 77 ⁰ 17'54.58" E | - | No change | No change |
| 4. | Plot Area | 89113.80 sq.m. | - | No change | 89113.80 sq.m. |
| 5. | Proposed Ground Coverage | - | - | - | -- |
| 6. | Proposed FAR | NA | NA | NA | NA |
| 7. | Non FAR Area | NA | NA | NA | NA |
| 8. | Plant area | 20488.63 sq.m. | -- | -- | 20488.63 sq.m. |
| 9. | Total Green Area with Percentage | 29416.73sq.m. (@ 33 %) | 33% (Density @1700 plants/Ha. | 33% (Density @2500 plants/Ha. | 29416.73sq.m. (33 %) @2500 plants/ha. |
| 10. | Rain Water Collecting Pits | 6 Nos | 6 Nos | No Change | 6 Nos |
| 11. | STP Capacity | 20 KLD | - | 10 KLD | 30 KLD |
| 12. | Total Parking | 800 sq.m. | - | - | 800 sq.m. |
| 13. | Organic Waste Converter | NA | NA | NA | NA |
| 14. | Maximum Height of the Building (till terrace) | NA | NA | NA | NA |
| 15. | Power Requirement | Sanctioned load 2500 kVA, Contract demand 2000kVA | - | No Change | Sanctioned load 2500 kVA, Contract demand 2000 kVA |
| 16. | Power Backup | - | - | - | DG set (2 nos,1010 KVA) (1 Nos.-625 KVA),(1Nos.-500 KVA),(1Nos.-320 KVA) |
| 17. | Total Water Requirement | 160 KLD (130Fresh+30Recycle) | - | 60KLD (Fresh -21.5 for domestic only+38.5 recycle water) | 220 KLD (151.5 Fresh+68.5 Recycle) |
| 18. | Domestic Water Requirement | 10 KLD | - | 21.5 KLD | 31.5 KLD |
| 19. | Fresh Water Requirement | 130 KLD | - | 21.5 KLD | 151.5 KLD |
| 20. | Treated Water | 80 KLD | - | 12.5KLD | 92.5 KLD |

| | | | | | | |
|-----|---|-----------------------|--------|-------------|-------------|---------------|
| 21. | Waste Water Generated | 80 KLD | - | 20.2 KLD | 100.2 KLD | |
| 22. | Solid Waste Generated | -- | - | -- | -- | |
| 23. | Biodegradable Waste | 50 kg/day | - | 37.5 kg/day | 87.5 kg/day | |
| 24. | No. of Floors | NA | NA | NA | NA | |
| 25. | Dwelling Units | NA | NA | NA | NA | |
| 26. | Salable Units | NA | NA | NA | NA | |
| 27. | Basement | NA | NA | NA | NA | |
| 28. | Community Center | NA | NA | NA | NA | |
| 29. | Convenient Shopping | NA | NA | NA | NA | |
| 30. | Stories | NA | NA | NA | NA | |
| 31. | R+U Value of Material used (Glass) | NA | NA | NA | NA | |
| 32. | Total Cost of the project: | i) Land Cost | 137 cr | - | 7 cr | Rs. 144 Crore |
| | | ii) Construction Cost | | | | |
| 33. | CER | - | - | 107 Lacs | 107 lacs | |
| 34. | EMP Cost/Budget | 339 lacs | | 478.34 lacs | 921.34 lacs | |
| 35. | Incremental Load in respect of (mg/m ³) | | | 0.93 | | |
| | i) PM ₁₀ | - | - | | | |
| | ii) PM _{2.5} | - | | 0.62 | | |
| | iii) NO ₂ | 1.5 | - | 1.85 | | |
| | iv) SO ₂ | - | - | 1.23 | | |
| | v) CO | 1.1 | - | < 0.1 | | |

Table 1: Total Chemicals Required

| Material | Existing Capacity (KL) | Proposed Storage Capacity (KL) (No Change) | Storage TLVs (No Change) | Classification |
|----------------------|------------------------|--|--------------------------|----------------|
| Methanol | 80 | | | Non-dangerous |
| Ethanol | 14 | | | Petroleum |
| Methylene Dichloride | 40 | | | (No Change) |
| Acetone | 10 | | | |
| Toluene | 30 | | | |
| Ethyl Acetate | 10 | | | |
| Acetonitrile | 5 | | | |
| HSD | 20 | | | |

**Table 2:
List of Raw Materials Required**

| S. No. | Name of the Therapeutic Group | Name of the Raw Material | Existing Raw Materials Capacity (TPA) | Proposed Raw Materials Capacity (TPA) | Total Raw Materials Capacity (TPA) | Mode of Transport | Source | Distance from source (km) |
|--------|---------------------------------------|------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|-------------------|--------------|---------------------------|
| 1. | Colchicine & colchicoside derivatives | Gloriosa Seeds | 350 | No Change | 350 | By Road | Agri-culture | 2000 |
| 2. | Hyoscine & derivatives | Duboisia Leaves & Belladonna Roots | 320 | No Change | 320 | By Sea | Agri-culture | From Australia |
| 3. | Taxols | Taxus Baccata | 250 | No Change | 250 | By Road | Agri-culture | 700 |
| 4. | Digoxin | Digitalis Lanata Leaves | 100 | No Change | 100 | By Sea | Agri-culture | From Europe |

| | | | | | | | | |
|-----|------------------------|--------------------------------|------|-----------------------------------|------|---------|--------------|-------------|
| 5. | Vinpocetine | Vocanga Seeds | 400 | No Change | 400 | By Sea | Agri-culture | From Africa |
| 6. | Pygeum Extract | Prunus Africana | 30 | No Change | 30 | By Sea | Agriculture | From Africa |
| 7. | Reserpine | RauWolfiaVomitoria | 30 | No Change | 30 | By Sea | Agri-culture | From Europe |
| 8. | Nicotine & derivatives | NicotinaTobbacum | 1000 | Purchase Nicotine Semi pure | 1000 | By Road | Agri-culture | 200 to 1500 |
| 9. | Enoxolone | Acetyl Glycyrrhethenic Acid | 10 | No Change | 10 | By Road | Agri-culture | 200 |
| 10. | Tropanes& derivatives | Tropine | 1.4 | No Change | 1.4 | By Sea | Agri-culture | From China |

| S. No. | Therapeutic Group | Existing (TPA) | Proposed (TPA) | Total (TPA) |
|--------------|---------------------------------------|----------------|----------------|----------------|
| 1. | Colchicine & colchicoside derivatives | 2.150 | No Change | 2.150 |
| 2. | Hyoscine& derivatives | 7.200 | No Change | 7.200 |
| 3. | Taxols | 0.250 | 0.050 | 0.300 |
| 4. | Digoxin | 0.120 | No Change | 0.120 |
| 5. | Vinpocetine | 4.000 | No Change | 4.000 |
| 6. | Pygeum Extract | 0.150 | No Change | 0.150 |
| 7. | Reserpine | 0.100 | No Change | 0.100 |
| 8. | Nicotine & derivatives | 75.000 | 110.000 | 185.000 |
| 9. | Enoxolone | 6.000 | No Change | 6.000 |
| 10. | Tropanes& derivatives | 0.700 | No Change | 0.700 |
| Total | | 95.670 | 110.050 | 205.720 |

Table 5: Solid Waste Generation

| Particulars | Existing (kg/day) | Proposed (kg/day) | Total (kg/day) | Treatment/ disposal |
|---------------------------------------|-------------------|-------------------|----------------|---|
| Municipal Solid Waste (@0.125Kg/ day) | 50 | 37.5 | 87.5 | It is being sent to Municipal waste disposable site, Faridabad. |

Table 6: Liquid Effluent

Treatment of domestic waste water is done through STP (Capacity-15 KLD) has already provided with adequate capacity in existing plant. The treated water from STP is stored in collection tank and pumped directly to the garden for irrigation purposes.

Proposed: Domestic waste water -25.2 KLD will be generated which will be sent to STP (capacity-30 KLD- MBBR Technology). Periodic cleaning of sludge from Modular STP will be perform. And sludge collected from modular STP will be used for Plantation as manure. The treated water will be used for plantation. The details are incorporated in Chapter 4 of Final EIA/EMP report.

Waste water generated from the industrial process is sent to ETP Capacity – 80KLD (Biological treatment) and sludge generated from ETP is being sent to GEIPL site Faridabad. ETP treated water is being sent RO plant (3 stage) Capacity – 80 KLD and RO permeate will be reused in cooling tower. Further effluent from RO plant is being sent to MVR (capacity-50 KLD) followed by MEE & ATFD (capacity-10 KLD).

Table 7:

Details of the human resource

| Particular | Existing | Proposed | Total |
|--------------|------------|------------|------------|
| Permanent | 300 | 200 | 500 |
| Skilled | 0 | 0 | 0 |
| Semi-skilled | 100 | 100 | 200 |
| Total | 400 | 300 | 700 |

| Material | Capacity (KL) |
|----------|---------------|
| Methanol | 80 |

| | |
|----------------------|----|
| Ethanol | 14 |
| Methylene Dichloride | 40 |
| Acetone | 10 |
| Toluene | 30 |
| Ethyl Acetate | 10 |
| Acetonitrile | 5 |
| HSD | 20 |

| S.No. | Hazardous waste description | Category as per HWM Rules | Existing quantity (per annum) | Proposed quantity (per annum) | Total quantity (per annum) | Unit | Method of Disposal |
|--------------|---------------------------------------|---------------------------|-------------------------------|-------------------------------|----------------------------|------|---|
| 1 | ETP Sludge | 34.3 | 2400 | 8000 | 10,400 | Kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 2 | Used Oils and Spent Oil | 5.1 & 5.2 | 1000 | - | 1000 | Lit | It will be disposed through authorized handlers |
| 3 | Process residue and waste process oil | 28.1 | 33000 | 17,000 | 50,000 | Kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 4 | Off Specification product | 28.3 | 200 | - | 200 | Kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 5 | Expiry Drugs/Medicines | 28.4 | 250 | - | 250 | Kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 6 | Spent solvent | 28.6 | 96000 | 150000 | 2,46,000 | Ltr | Authorized Recyclers |
| 7 | Spent Carbon | 28.3 | 240 | - | 240 | Kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 8 | Empty barrels/Containers | 33.1 | 1200 | 6000 | 7200 | Nos | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| 9 | Exhaust alumina | -- | - | 50000 | 50000 | kg | It will be sent to GEPIL site at Faridabad for treatment and disposal |
| TOTAL | | -- | 1,34,290 | 2,31,000 | 3,65,290 | | |

| Sr. No. | Location | Proposed activity | Costs (lacs) |
|---------|-------------------------------------|--|--------------|
| 1 | Forest Office, Faridabad | 1 no. for safe and hygienic Drinking water hot and cold dispenser | 0.09 |
| 2 | Village Kaili, Ballabgarh | Repairing & Painting work of Government School Building Including Toilets. 1.Civil work 2. Painting work 3.Tile Work 4.Electrical Fittings 5. Furniture | 7 |
| 3 | Village Kaili, Bapunagar&Ballabgarh | Solar Lights - 50 nos. | 8 |
| 4 | Village Kaili, Bapunagar&Ballabgarh | Street Light - 200 nos. | 3 |
| 5 | Village Kaili, Bapunagar&Ballabgarh | Tree Plantation - 3000 nos. | 3 |
| 6 | Village Kaili, Bapunagar&Ballabgarh | Rain Water Harvesting - 20 nos. | 10 |
| 7 | Village Kaili, Ballabgarh | 22 nos. CCTV cameras with DVR and Monitor | 2 |

| | | | |
|--------------|------------------------------|--|---------------|
| | | installation for surveillance in all village roads | |
| 8 | Village Bapunagar, Faridabad | Repairing & Painting work of Government School Building Including Toilets. 1. Civil work 2. Painting work 3. Tile Work 4. Electrical Fittings 5. Furniture | 8 |
| 9 | Village Kaili, Ballabgarh | Installation and upkeep of RO plant for clean drinking water with new borewell and submersible pump | 2 |
| 10 | Kurnool, Andhra Pradesh | Schools - 6 nos in Kurnool - Various Activities like books, borewell, boundary wall etc | 10 |
| 11 | Ballabgarh and Neemrana | Distribution of free medicines in Nearby Government Hospitals and Villages | 35 |
| 12 | Ballabgarh and Neemrana | Medical Camp at Village Kund, Rewari with free distribution of medicines 6 | 2 |
| 13 | Ballabgarh | Medical Camp - 3 nos + Eye Camps 3 nos at village Kaili, Ballabgarh & Rewari | 5 |
| 14 | Neemrana | Computer -2nos. + 2 nos. Printers + 5 nos. Chairs + 2 Almirahs for Neemrana New SP2 Office | 2 |
| 15 | Ballabgarh | Reduction of carbon and emission trading will be projected Battery Charging station. | 12.5 |
| TOTAL | | | 107.84 |

| S. No. | Parameters | Units | Boiler (Rice husk) | | | DG SET | | | | |
|--------|-----------------------------|---------------------|---------------------|---------------------|---------------------|--------------------|-------------------|----------------------------------|----------------------------------|----------------------------------|
| | | | 4 TPH | 6 TPH | 6 TPH | 1010 KVA Dual fuel | 1010KVA Dual fuel | 625 KVA HSD | 500 KVA HSD | 320 KVA HSD |
| 1. | Stack Height | M | 30 | 30 | 30 | 30 | 30 | 12 | 12 | 9 |
| 2. | Top diameter of Chimney | M | 2 | 2 | 2 | 0.15 | 0.15 | 0.25 | 0.35 | 0.35 |
| 3. | Flue gas velocity | m/sec | 15 | 12 | 15 | 14 | 14 | 14 | 12 | 12 |
| 4. | Exit Flue gas temperature | Deg K | 130 | 130 | 130 | 423 | 423 | 423 | 423 | 423 |
| 5. | Flue gas flow rate | m ³ /Min | 240 | 240 | 240 | 0.25 | 0.25 | 0.69 | 1.154 | 1.154 |
| 6. | Emission rate at stack exit | | | | | | | | | |
| A. | PM | g/s | 218 | 115 | 190 | 0.3 g/kw-hr | 0.3 g/kw-hr | 0.3 g/kw-hr | 75 | 75 |
| B. | PM _{2.5} | g/s | | | | 9.2 g/kw-hr | 9.2 g/kw-hr | 9.2 g/kw-hr | 710 ppmv | 710 ppmv |
| C. | NO _x | g/s | 7.9 | 6.5 | 7.5 | - | - | - | - | - |
| D. | SO ₂ | g/s | 4 | 3 | 4.2 | 3.5 g/kw-hr | 3.5 g/kw-hr | 3.5 g/kw-hr | 150 | 150 |
| E. | CO | | | | | | | | | |
| | APCM | | Bag Filter, Cyclone | Bag Filter, Cyclone | Bag Filter, Cyclone | - | - | Retrofit emission control device | Retrofit emission control device | Retrofit emission control device |

| S.No | Equipment Name | Nos. |
|------|--|------|
| | Air Handling Unit | 15 |
| | ETP (80 KLD) | 1 |
| | Ultra filtration System | 1 |
| | Membrane Filtration Unit | 2 |
| | Multi Effect Evaporator | 1 |
| | Agitated Thin Film Dryer | 1 |
| | Storage Tank | 100 |
| | Grinding Machine | 5 |
| | Sifter | 2 |
| | Liquid Nitrogen Plant | 1 |
| | Autoclave | 2 |
| | Incubator | 7 |
| | Electric Oven | 3 |
| | Sealing Machine | 10 |
| | Shell & Tube Condenser | 50 |
| | Wiped Film Evaporator | 4 |
| | Centrifuge | 1 |
| | Chiller | 2 |
| | Distillation Still | 1 |
| | Liquid Extraction Column | 2 |
| | Percolator | 2 |
| | Filter Press | 1 |
| | Agitated Nutsche Filter | 1 |
| | Desolventized Toaster | 1 |
| | Rised Film Evaporator | 1 |
| | Extractor | 1 |
| | Pelletizer | 2 |
| | Screw Conveyor | 3 |
| | Boiler | 3 |
| | DG set (2 nos,1010 KVA)(1 Nos.-625 KVA)(1Nos.-500 KVA),(1Nos.-320 KVA) | 5 |
| | STP (capacity-10KLD) | 1 |

Proposed machinery

| S.No. | Equipment Name | Nos. |
|-------|--|------|
| | Boiler - 6 Ton (Replacement of 1 existing boiler of 4 tons) *Standby | 1 |
| | Shell & Tube Condenser | 10 |
| | Distillation Column | 1 |
| | Rector | 5 |
| | Storage Tank | 10 |
| | Mechanical Vapor Recompression (MVR)-ETP | 1 |
| | STP (20 KLD) | 1 |

Revised Cost Provision for Environmental Measures

| S. No. | Description of Item | Existing Capital Cost (In Lacs) | Recurring Cost | Proposed capital cost | Proposed Recurring cost | Total Existing +proposed Capital Cost | Total Existing +proposed Recurring Cost | Remarks |
|--------|---|---------------------------------|----------------|-----------------------|-------------------------|---------------------------------------|---|--------------------------------|
| 1 | Air Emission mitigation measure adopted | 100 | 15 | 180 | 14 | 309 | 30.9 | Multicyclone, Water sprinkling |

| | | | | | | | | |
|--------------|--|------------|-------------|---------------|-------------|---------------|---------------|--|
| | for point source, area source and line source | | | | | | | |
| 2 | Water discharge mitigation measures to maintain ZLD with effectiveness | 210 | 35 | 135 | 18.5 | 398.5 | 39.85 | STP, ETP, MVR RO and MEE |
| 3 | Plantation Development | 9 | 0.5 | 24 | 2.4 | 33 | 2.9 | The existing plantation is 33% in 2.94 Ha. Density of the plantation will be strengthened in the proposed expansion. |
| 4 | Fire fighting | 20 | 5 | 41 | 4.1 | 70.1 | 7.01 | Firefighting equipments as per NBC code are installed and FIRE NOC is already obtained. |
| 5 | Corporate Environmental Responsibility | -- | -- | 98.34 | 9.5 | 107.84 | 10.784 | Reduction of carbon and emission trading will be projected Battery Charging station. |
| Total | | 339 | 55.5 | 478.34 | 48.5 | 921.34 | 92.134 | |

5. In view of the recommendations made by State Expert Appraisal Committee (SEAC) in the said case and further consideration of the documents/details submitted by the Project Proponent; the Authority after discussions decided during **174th Meeting held on 24.05.2024** to **“GRANT ENVIRONMENT CLEARANCE”** to *M/s Alchem International Pvt. Ltd. (as per Factory License issued by Labour Department, Haryana vide Application ID 59951 dated 10.02.2022)*, **UNDER CATEGORY 5(f) of EIA NOTIFICATION, 2006 within the scope & meaning of EIA Notification dated 14.09.2006.**

Copy To

1. Director (IA Division), MoEF& CC, GoI, Indira Paryavaran Bhavan, Zorbagh Road- New Delhi-110003.
2. Chairman, State Environment Impact Assessment Authority, Bay No. 55-58, Prayatan Bhawan, Sector-2, Panchkula, Haryana
3. Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula.
4. Director, Environment & Climate Change Department, Haryana, SCO 1-3, Sector-17 D, Chandigarh-160017
5. Director General, Town & Country Planning Haryana, Plot No. 3, Sector - 18A, Madhya Marg, Chandigarh- 160018.
6. Regional Office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160018.
7. Concerned File/ Office Copy

Annexure 1

Specific EC Conditions for (Synthetic Organic Chemicals Industry)

1. Specific Conditions

| S. No | EC Conditions |
|-------|---|
| 1.1 | Effluent shall be treated in the ETP and should adhere to the HSPCB/CPCB Guidelines |
| 1.2 | The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria |
| 1.3 | Separate wet and dry bins must be provided at ground level for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site |
| 1.4 | The PP shall comply with all the points raised during public hearing as the public hearing has already been conducted in the present case by the Haryana State Pollution Control Board, however, the project falls under Category B2 |
| 1.5 | The PP shall prepare an Action Plan for solvent recovery and their emission control and details of solvent to be used |
| 1.6 | The PP shall make arrangement to control the process emission from the proposed unit |
| 1.7 | The PP shall monitor the ambient air quality of emissions from the project shall include BOC, other process specific pollutants like NH ₃ , Cl, HBr, H ₂ S, HF etc. (as applicable) |
| 1.8 | The PP shall prepare the work zone monitoring arrangements for hazardous chemicals |
| 1.9 | The PP shall prepare the detailed effluent treatment scheme including segregation of effluent streams for unit adopting ZLD |
| 1.10 | The PP shall prepare the action plan for odour control and utilization of MEE/Dryers Cells |
| 1.11 | The PP shall submit the details of incinerator, if to be installed |
| 1.12 | The PP shall prepare the Risk Assessment Action Plan for safety, storage and handling of hazardous chemicals |
| 1.13 | The PP shall use material safety data sheets for all the chemicals being used or will be used |
| 1.14 | The PP shall ensure health and safety of the workers engaged in handling of toxic materials |
| 1.15 | The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws |
| 1.16 | Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974 |
| 1.17 | The Approval of the Competent Authority shall be obtained for structural safety of building |

| S. No | EC Conditions |
|-------|---|
| | code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc |
| 1.18 | The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA |
| 1.19 | The PP shall get permission of 3PH and 6 PH boiler extended after 20.06.2020 from Haryana Boiler Inspection Department |
| 1.20 | The PP shall submit the details of total organic solvent used for the process in the unit |
| 1.21 | The PP shall take all precautions to the use of chemicals and their vapors to manage the fire accident |
| 1.22 | Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance |
| 1.23 | No tree cutting has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 29416.73 sq.m. (33%) @2500 plants/ha. shall be provided for green area development |
| 1.24 | The process in the existing herbal extraction (phase I) shall not have involved any chemical reactions and shall have only and only extraction processes |
| 1.25 | 06 Rain water harvesting pits shall be provided for ground water recharging as per the CGWB norms |
| 1.26 | The PP shall install required number of Anti Smog Guns at the project site as per the requirement of HSPCB |
| 1.27 | The PP shall register themselves on https://dustapphspcb.com portal as per the Direction No. 14 dated 11.06.2021 issued regarding dust mitigation by Commission for Air Quality Management in National Capital Region and Adjoining Areas |

2. Statutory Compliance

| S. No | EC Conditions |
|-------|--|
| 2.1 | The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project. |
| 2.2 | The project proponent shall obtain clearance from the National Board for wildlife, if applicable |
| 2.3 | The Project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation of the approved Site Specific Conservation Plan/ Wildlife Management Plan shall be implemented in consultation with the state |

| S. No | EC Conditions |
|-------|---|
| | Forest Department. The implementation report shall be furnished along with the six monthly compliance report (in case of the presence of schedule-1 species in the study area). |
| 2.4 | The project proponent shall obtain Consent to establish/operate under the provision of air (Prevention &Control pollution) Act, 1981 and the water (Prevention & control of pollution) Act, 1974 from the concerned State Pollution Control Board/Committee |
| 2.5 | The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as attended from time of time |
| 2.6 | The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MJVA), 1989 |
| 2.7 | <p><u>Air quality monitoring and preservation:</u></p> <p>The project proponent shall install 24*7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories</p> |
| 2.8 | The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986 |
| 2.9 | The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant o the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOX in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions |
| 2.10 | To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within Permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines |
| 2.11 | Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions |
| 2.12 | National Emission Standard for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608 (E) dated 21st July, 2010 and amended form time to time shall be followed |
| 2.13 | The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16th November,2009 shall be complied with |
| 2.14 | <p><u>Water quality monitoring and preservation:</u></p> <p>The project proponent shall provide 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 (applicable in case of the projects achieving ZLD)</p> |

| S. No | EC Conditions |
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| 2.15 | As already committed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD) |
| 2.16 | The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent |
| 2.17 | Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard |
| 2.18 | Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system |
| 2.19 | The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant |
| 2.20 | The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard |
| 2.21 | <p><u>Noise monitoring and prevention:</u></p> <p>Acoustic enclosure shall be provided to DG set for controlling the noise pollution</p> |
| 2.22 | The overall noise levels in and around the plant areas shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation |
| 2.23 | The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986, viz. 75dB(A) during day time and 70 dB(A) during night time |
| 2.24 | <p><u>Energy Conservation measures:</u></p> <p>The energy sources for lighting purposes shall preferably be LED based</p> |
| 2.25 | The PP will follow guidelines of ECBC required for industrial projects |
| 2.26 | <p><u>Waste management:</u></p> <p>Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps. Process organic residue and spent carbon, if any, shall be sent to cement industries, ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF</p> |
| 2.27 | <p>The company shall undertake waste minimization measures as below:-</p> <ol style="list-style-type: none"> Metering and control of quantities of active ingredients to minimize waste. Reuse of by-products from the process as raw materials or as raw material substitutes in the other process. Use of automated filling to minimize spillage. |

| S. No | EC Conditions |
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| | <p>d. Use of Close Feed system into batch reactors e. Venting equipment through vapors recovery system f. Use of high pressure houses for equipment clearing to reduce wastewater generation</p> |
| 2.28 | <p><u>Green Belt:</u> The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department</p> |
| 2.29 | <p><u>Safety, Public hearing and Human health issues:</u> Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented</p> |
| 2.30 | <p>The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act</p> |
| 2.31 | <p>Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP , safe drinking water , medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project</p> |
| 2.32 | <p>Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act</p> |
| 2.33 | <p><u>Corporate Environment Responsibility:</u> The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility</p> |
| 2.34 | <p>The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and /or shareholders/stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of the six-monthly report</p> |
| 2.35 | <p>A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization</p> |
| 2.36 | <p>Action plan for implementing EMP and Environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority. The Year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted and for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report</p> |
| 2.37 | <p>Self environmental audit shall be conducted annually. Every three years third party environmental</p> |

| S. No | EC Conditions |
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| | audit shall be carried out |
| 2.38 | All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented |
| 2.39 | <p><u>Miscellaneous:</u></p> <p>The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently</p> |
| 2.40 | The copies of the environmental clearance shall be submitted by the project proponents to the heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt |
| 2.41 | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis |
| 2.42 | The project proponent shall monitor the criteria pollutants level namely:PM10, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company |
| 2.43 | The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal |
| 2.44 | The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company |
| 2.45 | The project proponent 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, commencing the land development work and start of production operation by the project |
| 2.46 | The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State government |
| 2.47 | The project proponent shall abide by the all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee |
| 2.48 | No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC) |
| 2.49 | Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (protection) Act, 1986 |

| S. No | EC Conditions |
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| 2.50 | The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory |
| 2.51 | The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions |
| 2.52 | The Regional Office of this Ministry shall monitor compliance of the stipulate conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports |
| 2.53 | The above conditions shall be enforced, inter-alia under the provisions of the Water (Presentation & Control of Pollution), Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986. Hazardous and Other Wastes (Management &Transboundry Movement)Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other order passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter |
| 2.54 | Any appeal against this EC 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 |

Standard EC Conditions for (Synthetic organic chemicals industry)

1. Specific Conditions

| S. No | EC Conditions |
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| 1.1 | Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond. |

Additional EC Conditions

N/A