## STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HARYANA Bay No. 55-58, Prayatan Bhawan, Sector-2, PANCHKULA.

No. SEIAA/HR/2017 89

Dated: 30-11-2017

То

Alchem International Pvt. Ltd, 25/2, Mathura Road, Village Kaili, Ballabgarh, Haryana.

Subject: Environmental Clearance for proposed Modernization with process integration of existing herbal extracts and their purified derivatives for manufacturing of herbal extracts and active pharmaceuticals ingredients (capacity 320 kg/day) at Village Kaili, Tehsil-Ballabgarh, Dist-Faridabad, Haryana.

Dear Sir,

This letter is in reference to your application no. dated 28.02.2017 addressed to M.S. SEIAA, Haryana received on 10.03.2017 and subsequent letters dated 11.08.2017 and 08.09.2017 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. 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 and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MOEF, GOI vide their Notification 23.3.2012, in its meetings held on 07.04.2017, 31.08.2017 and 27.09.2017 awarded "Gold" grading to the project.

It is inter-alia, noted that the project involves the project proposed [2] Modernization with process integration of existing herbal extracts and their purified derivatives for manufacturing of herbal extracts and active pharmaceuticals ingredients (capacity 320 kg/day) at Village Kaili, Tehsil-Ballabgarh, Dist-Faridabad, Haryana on a total area of the project is 8.9081 ha., No forestland is involved. No River passes through the project area. It has been reported that two canals (Agra Canal - 4.38 Km, E & Gurgaon Canal - 4.57 Km, NW) exist around the project and no modification/diversion in the existing natural drainage pattern at any stage has not been proposed. The targeted production capacity of the herbal extracts is 320 Kg/day. The water requirement for the proposed modernization will be 160 m<sup>3</sup>/day, out of which 130 m<sup>3</sup>/day is fresh water and will be obtained rrom the ground wate rand the remaining requirement of 30 m<sup>3</sup>/day will be met from the recycled water. The registration of borewell (Existing-4 Nos.) for drawl of groundwater is obtained from GGWA vides Registration No. HR/FBD/CT-403 to 406 dated 24.11.1998. The total power requirement shall be 2500 KVA which will be obtained from the HSEB. Local and native species shall be planted with a density of 2500 trees per hectare. The Project Proponent has proposed to develop green belt on 29396.73

sqm (33%) of project area. Total no. of 1000 saplings shall be planted in next five year. The existing solid waste generated in 2015-16 is 15,66,00 kg which is used as a fuel in boiler.

| S.<br>No.                                       | Product                                     | Raw Material<br>(Herb)              | Annual Quantity<br>of Herb used for<br>Extraction (MT) | Quantity of<br>Final Product<br>(Kg/Annum) |  |  |  |  |  |
|---|---|-------------------------------------|--|--|--|--|--|--|--|
| Pure Herbal Product Manufactured in the factory |   |                                     |  |  |  |  |  |  |  |
| 1   | 10-Deacetyl Baccatin<br>(10-DAB)            | Taxus Baccata                       | 250  | 150  |  |  |  |  |  |
| 2   | Colchicine                                  | Gloriosa Superba<br>Seeds           | 50   | 150  |  |  |  |  |  |
| 3   | Digoxin                                     | Digitalis Lanata<br>leaves          | 100  | 120  |  |  |  |  |  |
| 4   | Pygeum Extract                              | Prunus Africana                     | 30   | 150  |  |  |  |  |  |
| 5   | Reserpine                                   | Rauwolfia<br>vomitoria              | 30   | 100  |  |  |  |  |  |
| 6   | Nicotine                                    | Tobacco Dust                        | 1000   | 75000                                      |  |  |  |  |  |
| 7   | Nicotine Polacrilex/<br>Resinate/ Dihydrate | Tobacco Dust                        |  |  |  |  |  |  |  |
| 8   | Thiocolchicoside                            | Gloriosa Superba<br>Seeds           | 300  | 2000                                       |  |  |  |  |  |
| 9   | Hyoscine<br>Butylbromide                    | Duboisia Leaves                     | 300  | 7000                                       |  |  |  |  |  |
| 10  | Enoxolone                                   | Acetyl<br>Glycyrrhetenic<br>acid    | 10   | 6000                                       |  |  |  |  |  |
| 11  | Paclitaxel                                  | 10-Deacetyl<br>Baccatin<br>(10-DAB) | inhouse  | 100  |  |  |  |  |  |
| 12  | Vinpocetine                                 | <i>Vocanga</i> Seeds                | 400  | 4000                                       |  |  |  |  |  |
| PRODUCTS PROPOSED UNDER COMMERCIAL PRODUCTION   |   |                                     |  |  |  |  |  |  |  |
| 13  | Atropine Sulfate                            | Tropine                             | 1.2  | 500  |  |  |  |  |  |
| 14  | Cimetropium Bromide                         | Duboisia Leaves                     | 10   | 100  |  |  |  |  |  |
| 15  | Homatropine<br>Methylbromide                | Tropine                             | 0.2  | 100  |  |  |  |  |  |
| 16  | Hyoscyamine Sulfate                         | Belladona Roots                     | 20   | 100  |  |  |  |  |  |
| 17  | Methscopolamine<br>Bromide                  | Duboisia Leaves                     | 10   | 100  |  |  |  |  |  |

The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

Noise levels are in the range of 72.0 to 42.2 dB(A) for daytime and 34.0 to 57.7 dB(A) for nighttime. The existing solid waste generated in 2015-16 is 15,66,000 Kg which is used as a fuel in boiler. The proposed waste generated during the process and their management will be as follows :-

| S. | Hazardous waste                             | Category as | Quantity      | Unit | Method of Disposal  |
|----|---|-------------|---------------|------|---|
| No | description                                 | per HWMR    | generated per |      |   |
|    |   | Rules       | annum after   |      |   |
|    |   |             | modernization |      |   |
| 1  | Chemical sludge<br>from ETP                 | 35.3        | 2400          | Kg   | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |
| 2  | Used Oils and Spent Oil                     | 5.1 & 5.2   | 1000          | Lit  | It will be disposed through authorized handlers                             |
| 3  | Process residue<br>and waste process<br>oil | 28.1        | 33000         | Kg   | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |
| 4  | Off<br>Specification<br>product             | 28.3        | 200           | Kg   | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |
| 5  | Expiry Drugs/<br>Medicines                  | 28.4        | 250           | Kg   | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |
| 6  | Spent solvent                               | 28.6        | 96000         | Ltr  | Authorized Recyclers  |
| 7  | Spent Carbon                                | 28.3        | 240           | Kg   | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |
| 8  | Empty<br>barrels/Containers                 | 33.1        | 1200          | Nos  | It will be sent to GEPIL<br>site at Faridabad for<br>treatment and disposal |

[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations, have recommended the grant of environmental clearance for the project mentioned above, subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority in its meeting held on 22.11.2017 decided to agree with the recommendations of SEAC to accord necessary environmental clearance for the project under Category 5(f) of E1A Notification 2006 subject to the strict compliance with the specific and general conditions mentioned below:-

## **Specific Conditions**

- i) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the ministry vide G.S.R. 608(E) dated 21<sup>st</sup> July, 2010 and amended time to time shall be followed by the unit.
- ii) 3 TPH Thrmax boilers which is non fluidized boiler will either be converted into fluidized bed or if it remains non- fluidized than bag filter with multi- cyclone shall be installed to control particulate emissions within permissible limit. The gaseous emission shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iii) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing

closed storage, closed handling & conveyance of chemical/ materials. multi – cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment product, raw materials storage area etc. shall be regularly monitored. Odour management plan shall be implemented.

- iv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- v) The company shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall be simultaneously be sent to the Regional Office MoEF, the respective Zonal Office of CPCB and the HSPCB. The Levels of PM<sub>10</sub>, PM<sub>2.5</sub>, Sox, Nox, HCL, VOC and Co in the ambient air and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- vi) As proposed, process organic residue and spent carbon. ETP sludge, process inorganic & evaporation salt and shall be sent to GEPIL site at Faridabad for treatment and disposal.
- vii) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from Haryana SPCB shall be obtained for disposal of solid/ hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.
- viii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSCIHC) Rules, 11989 as amended in October, 1994 and January, 2000. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
  - 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) Total fresh water requirement from ground water source shall not exceed 160 KLD
    m<sup>3</sup>/ day and prior permission shall be obtained from the CGWA/SGWA.
  - Industrial effluent generation shall not exceed 80m<sup>3</sup>/day. Trade effluent shall be segregated into High COD/ TDS and Low COD/ TDS effluent streams. High COD/ TDS shall be passed through strippers followed by MEE. Low TDS effluent stream

and condensate shall be treated in ETP and then sent to CETP for further treatment. Highly concentrated effluent will be sent to captive incinerator for incineration.

- xii) Process effluent/ any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passes through guard pond.
- xiii) Online monitoring system (24x7 monitoring device) for pH meter, flow meter and TOC analyzer should be installed. Efforts shall be also made to explore the possibility of recycling/ reuse of the treated effluent. The data to be made available to the respective SPCB and in the Company's website.
- xiv) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.
- xv) Hazardous chemicals shall be stored in tanks in tanks farms, drums, carboys etc.flame arresters shall be provided to tank farm. Solvent transfer shall be by pumps.
- xvi) 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 norms.
- xvii) Occupation health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xviii) As per proposed, green belt over 29396.73 sqm land shall be developed within plant premises with at least 5.0 meter wide green belt on all sides along the periphery of the project area, in downwind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

Memoer Secretary, State Level Environment Impact Assessment Authority, Haryana, Panchkula.

Endst. No. SEIAA/HR/2017/

Dated:....

A copy of the above is forwarded to the following:

- The Additional Director (IA Division), MoEF&CC, GoI, Indra Paryavaran Bhavan, Zor bagh Road-New Delhi.
- 2. The Regional office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's no. 24-25, Sector 31-A, Dakshin Marg, Chandigarh.
- 3. The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Pkl.

Member Secretary, State Level Environment Impact Assessment Authority, Haryana, Panchkula.