STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC- 2014/ CR-389/TC-2
Environment department
Room No. 217, 2nd floor,
Mantralaya Annex,
Mumbai- 400 032.
Dated: 17 March, 2015

To,
Mr. Uday Patil
G – 60, MIDC, Tarapur,
Dist: Palghar, 401 506.

Subject: Environment clearance for Expansion Project of Bulk Drug & Intermediates Manufacture unit at plot no. G-60, MIDC Tarapur, Kolwade Village, Boisar, Dist. Thane by M/s. Aarti Drugs Limited

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification, 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 93rd meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 81st meeting.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(f) B1 as per EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Name of Project	Expansion of "Active Pharmaceutical Ingredients & Intermediate Products" at Plot No. : G – 60, MIDC- Tarapur, Village: Kolawade, Boisar, Taluka: Palghar, District: Palghar, Maharashtra.
Project Proponent	Mr. Uday Patil
Consultant	M/s. Enviro Analysts and Engineers Private Limited,
New Project/ Expansion in existing project/ diversification in exiting project	Expansion
Activity Schedule in the EIA Notification	5 (f), B1
Area Details	Plot area : 16,500 m^2 Green Belt area : 1675 m^2(10.15% of plot area)
Name of the Notified Industrial area/ MIDC	MIDC, Tarapur

<table>
<tr><td>ToR given by SEAC?
(if yes, then specify the meeting)</td><td>Yes.
ToR was issued on the 63rd meeting of State Expert Appraisal Committee-I vide F. No. SEAC 2011/CR-978/TC2 dated 29th December, 2012(Item No. 18)</td></tr>
<tr><td>Location details of the project</td><td>Latitude 19°47'15.68"N
Longitude 72°44'6.36"E.
The elevation of the project site is about 15 m above Mean Sea Level (MSL)
Address: Plot No. : G – 60, MIDC- Tarapur, Village: Kolawade, Boisar, Taluka: Palghar, District: Palghar, Maharashtra.</td></tr>
<tr><td>Production Details and By Products</td><td>
<table>
<tr><th>S. No.</th><th>Products</th><th>Existing Capacity (TPM)</th><th>Proposed Capacity (TPM)</th><th>Total Capacity (TPM) (Existing + Proposed)</th></tr>
<tr><td>1</td><td>Q-Acid</td><td>60</td><td>340</td><td>400</td></tr>
<tr><td>2</td><td>Metformin – HCl</td><td>80</td><td>45</td><td>125</td></tr>
<tr><td>3</td><td>Diclofenac Sodium</td><td>21</td><td>104</td><td>125</td></tr>
<tr><td>4</td><td>Ciprofloxacin – HCl</td><td>45</td><td>55</td><td>100</td></tr>
<tr><td>5</td><td>Bulk Drugs</td><td></td><td></td><td></td></tr>
<tr><td>A</td><td>Clopidogrel Bisulphate</td><td>2</td><td>28</td><td>30</td></tr>
<tr><td>B</td><td>Pioglitazone HCl</td><td>3</td><td>2</td><td>5</td></tr>
<tr><td>OR</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C</td><td>Telmisartan</td><td>NIL</td><td>10</td><td>10</td></tr>
<tr><td></td><td>Total</td><td>211</td><td>582</td><td>790*</td></tr>
<tr><td colspan="5">*Total is considering maximum production capacity</td></tr>
</table>
</td></tr>
<tr><td>Rain Water Harvesting (RWH)</td><td>Rainwater harvesting is proposed in the project to conserve the water. Rain water will be collected and reused for utility.</td></tr>
<tr><td>Total Water Requirement</td><td>
<table>
<tr><td>PARTICULARS</td><td>TOTAL (KLD)</td><td>SOURCE</td></tr>
<tr><td>DOMESTIC</td><td>12</td><td>MIDC, Tarapur</td></tr>
<tr><td>PROCESS</td><td>180</td><td>MIDC, Tarapur</td></tr>
</table>
</td></tr>
</table>

	COOLING TOWER	413	MIDC, Tarapur
	BOILER	145	MIDC ,Tarapur
	FLOOR WASH	9	MIDC ,Tarapur
	GARDENING	3	MIDC, Tarapur
	TOTAL	762 KLD	

Storm Water Drainage	Natural Drainage Pattern : W to E Size of SWD : 450 mm
Sewage Generation & Treatment	Industrial effluent generated will be 118 KLD. It will be treated in ETP of 119 KLD capacity. Domestic waste water generated will be 10 KLD. It will be treated in soak pit.

Effluent Characteristics

PARAMETER	RAW EFFLUENT	TREATED EFFLUENT	MPCB LIMIT	UNIT
PH	10	7.2	5.5-9.0	----
BIOLOGICAL OXYGEN DEMAND	900	23	100	mg/l
CHEMICAL OXYGEN DEMAND	2500	165	250	mg/l
TOTAL SUSPENDED SOLIDS	200	98	100	mg/l
TOTAL DISSOLVED SOLIDS	25500.0	255	2100	mg/l
OIL & GREASE	2	1.2	10	mg/l
SUPLHATES	1914	-	1000	mg/l
CHLORIDES	2230	23	600	mg/l

ETP Details	Amount of effluent generation (CMD) :118

<table>
<tr><td></td><td>Capacity of the ETP (CMD) : 119
Amount of treated effluent recycled (CMD): NIL
Amount of water sent to the CETP (CMD): 90
Membership of the CETP (If required): Received</td></tr>
<tr><td>Note on ETP technology to be used</td><td>Effluent will be treated till tertiary level.</td></tr>
<tr><td>Disposal of the ETP sludge</td><td>1 TPM will be disposed to CHWTSDF, Taloja.</td></tr>
<tr><td>Solid Waste Management</td><td>
<table>
<tr><td>Item No. in Schedule</td><td>Source</td><td>Total Quantity (TPM)</td><td>Handling</td></tr>
<tr><td>34.3</td><td>ETP Sludge</td><td>1</td><td>Sent to CHWTSDF, Taloja</td></tr>
<tr><td>28.1</td><td>Process Residues & wastes</td><td>117</td><td>Sent to Waste Heat Recovery Boiler(Onsite)</td></tr>
<tr><td>28.2</td><td>Spent Carbon</td><td>36</td><td>Sent to CHWTSDF, Taloja</td></tr>
<tr><td>28.5</td><td>Spent Organic Solvent</td><td>44</td><td>Sale to Authorized Re processor</td></tr>
<tr><td>35.1</td><td>Organic Liquid Residues</td><td>593</td><td>Sent to Waste Heat Recovery Boiler (Onsite)</td></tr>
<tr><td>20.3</td><td>Distillation Residues</td><td>40</td><td>Sent to Waste Heat Recovery Boiler (Onsite)</td></tr>
<tr><td>33.3</td><td>Discarded containers</td><td>2000</td><td>Sale to authorized recycler after decontamination</td></tr>
</table>
</td></tr>
<tr><td>Emission Standard</td><td>
<table>
<tr><td>Pollutant</td><td>Premissible standard</td><td>Proposed Concentration</td><td>Remarks</td></tr>
<tr><td>PM $_{2.5}$</td><td>60 $\mu g/m^3$</td><td><60</td><td>As per</td></tr>
</table>
</td></tr>
</table>

	PM_{10}	100 µg/m^3	<100	NAAQS
	SO_2	80 µg/m^3	<80	
	NOx	80 µg/m^3	<80	

Details of Fuel used: Source of Fuel Mode of Transportation of fuel to site	Sr. No.	Fuel	Qty
	1	Briquette (For 6TPH boiler)	30 TPD
	OR	Coal (For 6 TPH Boiler)	25 TPD
	2	FO(For 2TPH WHRB)	1.7 TPD
	3	HSD for DG Set	70 l/hr
Energy	Connected Load: 2000 KVA Power supply: MSEB 1 Nos. of DG set of capacity 437 KVA		
Green Belt Development	Green belt admeasuring 1675 m^2 is already present on site. This is 10.15 % of the total plot area. According to the guidelines set by MoEF, 33% of the plot area should be allotted for green belt development. Since it is already an existing unit, and no additional plot is added to the plant, there is no space remaining for additional green belt development. In order to adhere to the guidelines put forward by MoEF, the proponent has acquired an empty land of 100 Acres area as a compensatory land for afforestation (green belt development) for all industries of Aarti Group including this site. Out of which the 3770 sq.m is compensation for this site (G60) of Aarti Drugs Ltd.		
Details of pollution control system	Water: ETP is provided for treating industrial waste water till tertiary level. Air: Amongst all the processes, only Diclofenac Sodium production process emits HCl gas. The air pollution control equipment proposed for mitigation of HCl gas is a caustic scrubber. A wet scrubbing system is going to be provided for the 2TPH Waste Heat Recovery Boiler (WHRB) and a Multi-Cyclone dust collector is proposed for the 6 TPH Briquette Fired boiler. Solid: Sent to CHWTSDF, Taloja and Sold to Authorized Re processor.		

	Noise: Ear mufflers and ear plugs will be provided. Acoustic Enclosure for DG sets and Acoustic enclose for process air blower/Regeneration Air blower
EIA submitted	Yes

3. The proposal has been considered by SEIAA in its 81st meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :

General Conditions for Pre- construction phase:-

(i) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
(ii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
(iii) Proper Housekeeping programmes shall be implemented.
(iv) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.
(v) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)
(vi) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
(vii) Arrangement shall be made that effluent and storm water does not get mixed.
(viii) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
(ix) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
(x) The overall noise levels in and around the plant are 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 confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
(xi) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
(xii) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
(xiii) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
(xiv) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
(xv) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste

(Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.

(xvi) The company shall undertake following Waste Minimization Measures :
- Metering of quantities of active ingredients to minimize waste.
- Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
- Maximizing Recoveries.
- Use of automated material transfer system to minimize spillage.

(xvii) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.

(xviii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

(xix) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.

(xx) Separate silos will be provided for collecting and storing bottom ash and fly ash.

(xxi) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department

(xxii) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in

(xxiii) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.

(xxiv) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

(xxv) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO_2, NOx (ambient levels as well as stack emissions) or critical sectorai parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(xxvi) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

(xxvii) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

6. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.

7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Malini Shankar)
Member Secretary, SEIAA.

Copy to:

1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.

2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune – 411014. .

3. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.

4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.

5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).

6. Regional Office, MPCB, Thane.

7. Collector, Thane

8. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.

9. Select file (TC-3)

(EC uploaded on 31/03/2016)