STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC- 2014/CR-392/TC-2
Environment department
Room No. 217, 2nd floor,
Mantralaya Annex,
Mumbai- 400 032.
Dated: 28 January, 2016.

To,
M/s. Aarti Drugs ltd
Mahendra Indl. Estate,
Ground Floor, Plot No. 109-D,
Road NO. 27, Sion (E),
Mumbai 400022

Subject: Environment clearance for proposed manufacturing of Organic Chemicals and salts of 3600 MT/Month at plot no T-150, MIDC Tarapur, Palghar by M/s. Aarti Drugs ltd

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 106th 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 90th 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:

1	Name of project	Aarti Drugs Ltd. Plot No. T-150, M.I.D.C. Tarapur, Dist.- Thane
2	Project Proponent	Mr. Uday Patil Aarti Drugs Ltd. Plot No. T-150, M.I.D.C. Tarapur, Dist.-- Thane
3	Consultant	M/s. Goldfinch Engineering Systems Pvt. Ltd.
4	Accreditation of consultant (NABET Accreditation)	S. No. 70 in QCI NABET List of 168, dated December 5, 2014 for the proposed project category (5f) of the MoEF EIA notification Schedule
5	New project/expansion in existing project/modernization/diversification in existing project	New project

6	If expansion/diversification, whether environmental clearance has been obtained for existing project *(If yes enclose a copy with compliance table)*	NA
7	Activity schedule in the EIA Notification	5(f) B-1
8	Area Details	• Total plot area – 15600 m^2 • Proposed Built up area – 8167 m^2
9.	Name of the Notified Industrial Area/ MIDC area	Tarapur Industrial Estate
10.	TOR given by SEAC? (If yes then specify the meeting)	Yes
11.	Estimated capital cost of the project (Including cost for land, building, plant and machinery separately)	7270 Lakhs
12.	Location details of the project:	➢ Latitude : 19.800° N ➢ Longitude : 72.720° E ➢ 6.6 m above MSL
13.	Distance from protected areas/ critically polluted areas/ Eco Sensitive area/ inter- sate boundaries	No such area in the vicinity.
14.	Raw materials (including process chemicals, catalysts & additives)	Refer Prefeasibility Report
15	Production Details	Refer Table Below:

Sr. No.	Product Name	Production Capacity MT/Month

	1	Poly Allyl Amine HCl	400	
	2	Cyclopropyl Amine	400	
	3	Salt Recovery Plant	2700	
	4	Hydrogenation Products	100	
		Total	3600	

16.	Process details / manufacturing details	Please refer prefeasibility report
17	Rain water Harvesting (RWH)	Roof rain water harvesting proposed at site
18.	Total Water Requirement	Refer Table Below:

Particulars	Consumption (CMD)	Loss (CMD)	Effluent (CMD)
Domestic	3.5	0.5	3
Industrial Processing	90	14	76
Cooling Tower	350	330	20
Boiler	15	13.5	1.5
Gardening	15	15	-
Total	473.5	373	100.5

19.	Storm water drainage	• Natural water drainage pattern : Proper and separate storm water drains available, as per natural slope
20.	Sewage generation and treatment	• Amt. of sewage generation (CMD): 3 • Proposed treatment for the sewage: Treatment in combined ETP
21.	Effluent Characteristics	

Sr. No.	Parameters	Inlet Effluent Characteristics	Outlet Effluent Characteristics	Effluent discharge standards (MPCB)
1	pH	5-9	7.0 - 8.0	6.5 To 9.0

2	TSS	260 mg/lit	60-80 mg/lit	<100 mg/lit
3	BOD	4100 mg/lit	40-60 mg/lit	<100 mg/lit
4	COD	7020 mg/lit	200-220 mg/lit	<250 mg/lit
5	O & G	30-50 mg/lit	6-8 mg/lit	<10 mg/lit

22.	ETP details	• Amount of effluent generation (CMD): 100.5 CMD including 3 CMD from domestic • Capacity of the ETP: 120 CMD • Amount of treated effluent recycled : -- • Amount of water send to the CETP: 100.5 CMD • Membership of CETP (*if require*): Application under Process
23.	Note on ETP technology to be used	Primary, Secondary, Tertiary Treatment
24.	Disposal of The ETP sludge	ETP Sludge shall be disposed through Common Hazardous Waste treatment storage disposal facility, at MWML, Taloja. CHWSTDF membership is in process.
25.	Solid Waste Management	Refer Table Below:

Non-Hazardous Waste:

Sr No	Description	Total	Method of Disposal
1	Ash from Boiler	Coal:11765 Kg/Day Or Briquette:2040 Kg/Day	Sale to Brick Manufacture / as fertilizer

Hazardous Waste:

Sr. No.	Description	Cat	Total	Method of Disposal
1	ETP Sludge	34.3	1000 kg/M	MWML
2	Empty Drums	33.3	1000 Nos/M	Sale to authorised party
3	Spent Oil	34.4	150 Kg/M	MWML
4	Distillation Residue	20.3	3775 Kg/M	Sale to authorised party / MWML
5.	Spent Carbon (From ETP)	28.2	1000 kg/M	MWML

26.	Atmospheric Emissions (Flue gas characteristics SPM, SO_2, NO_X	Sr. No.	Pollutant	Source of Emission	Emission rate
		1.	SPM	Process /Boiler/ D.G. Set	<150 mg/nm^3

	, CO etc.)	2.	SO_2	Boiler/ D.G. Set	<67 kg/ hr.
		3.	NO_X	Boiler/ D.G. Set	<50 ppm
		4.	Ammonia	Process	<35 mg/nm^3
		5.	HCl	Scrubber	<50 ppm

27. Stacks emission Details

Plant section & units	Fuel Used	Stack No.	Height from ground level (m)	Internal diameter (Top)(m)	Emission Rate	Temp. of Exhaust Gases
Boiler (10TPH)	Briquette - 1700 kg/h or Coal - 1270 kg/h	1	48m	1200 mm	28333 m^3/h	180^{0}C
DG Set (1200 KVA)	1	HSD 300 lit/h	7 m above enclosure	150 mm	--	Max 200 °c
HCL Scrubber	-	1	30 m	600 mm	2000 CFM	RT

28. Emission Standard — Refer Table below:

Pollutants	Emission standard limit Proposed Limit	MPCB Standards
SPM/ TPM	<150 mg/nm^3	<150 mg/nm^3
SO_2	<67 kg/ hr.	<67 kg/ hr.
Ammonia	<50 ppm	<50 ppm
HCl	<35 mg/nm^3	<35 mg/nm^3
NO_X	<50 ppm	<50 ppm

29. Ambient Air quality data

Pollutant	Permissible Standard (24 H)	Proposed Concentration	Remarks
SPM	100 µg/m^3	< 100 µg/m^3	Shall be

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<tr><td></td><td></td><td>
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<tr><td>(PM_{10})</td><td></td><td></td><td>within limit</td></tr>
<tr><td>RPM ($PM_{2.5}$)</td><td>60 µg/m^3</td><td>< 60 µg/m^3</td><td>Shall be within limit</td></tr>
<tr><td>SO_2</td><td>80 µg/m^3</td><td>< 80 µg/m^3</td><td>Shall be within limit</td></tr>
<tr><td>NO_X</td><td>80 µg/m^3</td><td>< 80 µg/m^3</td><td>Shall be within limit</td></tr>
<tr><td>CO</td><td>2 µg/m^3 (8 H)</td><td>< 2 µg/m^3</td><td>Shall be within limit</td></tr>
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</td></tr>
<tr><td>30.</td><td>Details of Fuel to be used:</td><td>
<table>
<tr><th colspan="2">Sr. No.</th><th>Fuel</th><th>Consumption</th><th>% Ash</th><th>% Sulphur</th></tr>
<tr><td rowspan="2">1</td><td rowspan="2">Or</td><td>Briquette</td><td>1700 kg/h</td><td>5</td><td>NIL</td></tr>
<tr><td>Coal</td><td>1270 kg/h</td><td>38.6</td><td>0.5</td></tr>
<tr><td>2</td><td></td><td>HSD</td><td>336 Lit/h</td><td>0.01</td><td>1</td></tr>
</table>
</td></tr>
<tr><td>31.</td><td>Energy</td><td>Power Supply :
• Power requirement : 2500 KVA
DG sets:
• Number and capacity DG sets to be used: 1 set of 1500 KVA</td></tr>
<tr><td>32.</td><td>Green Belt Development</td><td>• Adequate Green belt is developed and maintained on a separate plot in the vicinity.
In addition 31% of open area is dedicated for green belt development
• Green belt area: 1127 m^2
• Number of species of trees & shrubs to be planted: 150
• Number, size, age and species of trees to be cut, trees to be transplanted : 5 Nos.</td></tr>
<tr><td>33.</td><td>Details of pollution control Systems:</td><td>
<table>
<tr><th>Sr. No.</th><th>Source</th><th>Existing pollution control system</th><th>Proposed to be installed</th></tr>
<tr><td>1</td><td>Air</td><td>Not Applicable as project is totally new.</td><td>By dispersal into atmosphere through chimney of adequate/ recommended height. APC equipment will be provided for process and fugitive</td></tr>
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<tr><td></td><td></td><td></td><td></td><td></td><td>emissions.

Solvent recovery system will be installed wherever possible and practical.</td></tr>
<tr><td></td><td></td><td></td><td>2</td><td>Water</td><td>A Combined ETP will be installed to treat 100.5 CMD of waste water which includes 97.5 CMD effluents from industry and 3 CMD Domestic effluents. The capacity of the ETP will be 120 CMD and it will treat effluent through primary, secondary and tertiary level. Treated effluent will be discharge to CETP.</td></tr>
<tr><td></td><td></td><td></td><td>3</td><td>Noise</td><td>Acoustic enclosure for proposed D.G & PPE</td></tr>
<tr><td></td><td></td><td></td><td>4</td><td>Solid Waste</td><td>Hazardous waste will be disposed to MWML CHWTSDF.</td></tr>
<tr><td>34.</td><td>Environmental Management plan Budgetary Allocation</td><td colspan="4">• Capital cost: 7270 Lakhs
• O&M cost (with break up):
<table><tr><th>Sr. No.</th><th></th><th>Recurring Cost per Annum</th><th>Capital Cost</th></tr><tr><td>1</td><td>Air Pollution Control</td><td>2 Lakhs</td><td>20 Lakhs</td></tr><tr><td>2</td><td>Water Pollution Control</td><td>5 Lakhs</td><td>100 Lakhs</td></tr><tr><td>3</td><td>Noise Pollution Control</td><td>0.5 Lakh</td><td>5 Lakhs</td></tr><tr><td>4</td><td>Environment Monitoring and Management</td><td>5 Lakh</td><td>10 Lakhs</td></tr><tr><td>5</td><td>Occupational Health</td><td>0.5 Lakhs</td><td>18 Lakhs</td></tr><tr><td>6</td><td>Green Belt</td><td>1 Lakh</td><td>10 Lakhs</td></tr></table></td></tr>
</table>

			7	Solid waste management	10 Lakhs	--
			8	CSR	145 Lakhs in Next five Years	
35	EIA submitted (*If yes then submit the salient features*)	EIA is submitted Proposed project is environmentally sound proposal with in built control and mitigation measures not likely to have any significant adverse impact on the environment				
36	Public hearing report (*If public hearing conducted then submit the salient features*)	Not Applicable. Proposed project is in Notified Industrial area				
37	Air pollution, water pollution issues in the project area, if any	No. CETP for the entire effluent from MIDC area already exists. All industries are being regulated & monitored by MPCB in this MIDC area with developed infrastructure				

38. Storage of chemicals (inflammable/ explosive/hazardous/toxic substances)

Underground Storage tank

Sr. No.	Use for Solvent	Consumption (TPD)	Maximum Storage	Source of Supply	Means of Transportation
1	Methanol	10	20 KL	Out Source	By Road
2	MDC	8.5	20 KL	Out Source	By Road

3. The proposal has been considered by SEIAA in its 90th 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) This environmental clearance is issued subject to implementation of online air monitoring facility equipment.

(iii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.

(iv) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.

(v) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.

(vi) Proper Housekeeping programmers shall be implemented.

(vii) 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.

(viii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)

(ix) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.

(x) Arrangement shall be made that effluent and storm water does not get mixed.

(xi) 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.

(xii) 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.

(xiii) 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.

(xiv) 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.

(xv) 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.

(xvi) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.

(xvii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

(xviii) 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.

(xix) 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.

(xx) 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.

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

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

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

(xxiv) 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

(xxv) 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

(xxvi) 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.

(xxvii) 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.

(xxviii)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.

(xxix) 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.

(xxx) 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 7 years as per MoEF & CC Notification dated 29th April, 2015 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, Palghar
8. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
9. Select file (TC-3)

(EC uploaded on 28/01/2016)