STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date:March 17, 2018

To,
Aarti Industries Ltd., Unit III, Plot No. K-17,18,19, MIDC Tarapur
at Plot No. K17,18,19, MIDC Tarapur Tal Palghar, Dist Palghar Maharahstra

Subject: Environment Clearance for Proposed Increase in Production Capacity of Synthetic Organic Chemicals Manufacturing Facility by Aarti Industries Ltd. at Plot No. K17,18,19, MIDC Tarapur Tal Palghar, Dist Palghar Maharahstra

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 th meeting and 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 121st meetings.

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

Brief Information of the project submitted by you is as below :-

1.Name of Project	Proposed Increase in Production Capacity of Synthetic Organic Chemicals Manufacturing Facility by Aarti Industries Ltd. at Plot No. K17,18,19, MIDC Tarapur Tal Palghar, Dist Palghar Maharahstra
2.Type of institution	Private
3.Name of Project Proponent	Aarti Industries Ltd., Unit III, Plot No. K-17,18,19, MIDC Tarapur
4.Name of Consultant	Aditya Environmental Services Pvt Ltd
5.Type of project	Not applicable
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion in existing project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not Applicable
8.Location of the project	Plot No. K17,18,19, MIDC Tarapur Tal Palghar, Dist Palghar Maharahstra
9.Taluka	Palghar
10.Village	Salwad village
11.Area of the project	MIDC Tarapur
12.IOD/IOA/Concession/Plan Approval Number	MIDC Tarapur
	IOD/IOA/Concession/Plan Approval Number: MIDC approved plot plan
	Approved Built-up Area: 8397.6
13.Note on the initiated work (If applicable)	Not applicable
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	MIDC approval
15.Total Plot Area (sq. m.)	8233 sq.m
16.Deductions	Not applicable
17.Net Plot area	Not applicable
18.Proposed Built-up Area (FSI & Non-FSI)	**FSI area (sq. m.):** Not applicable
	Non FSI area (sq. m.): Not applicable
	Total BUA area (sq. m.): Not applicable
19.Total ground coverage (m2)	Not applicable
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	Not applicable

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21.Estimated cost of the project	300000000

22.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Dimethyl Urea	27	0	0
2	Cyano Acetic Acid	25	0	25
3	Nitrosouracil	6	44	50
4	Theophylline IP/BP/USP	50	0	50
5	Aminophylline IP/BP/USP	1.5	8.5	10
6	Etophylline IP/BP/USP	30	20	50
7	Caffeine IP/BP/USP and food grade	80	220	300
8	Theobromine IP/BP/USP	5	5	10
9	Choline Theophylinate BP	1	0	1
10	Acefylline Piperazine	1	0	1
11	Diprophylline BP/USP	2	0	2
12	Sodium Theophyllinate	0	250	250
13	Uracil	0	50	50
14	Theophylline crude	0	60	60
15	Liquor Ammonia (Byproduct)	15	0	0
16	Recovered Acetic Acid (Byproduct)	30	330	360
17	Recovered Sodium Chloride (Byproduct)	21	364	385
18	Recovered Sodium Sulphate (Byproduct)	21	243	264
19	Recovered Solvent (basis 100%) (Byproduct)	0	60	60

23.Total Water Requirement

Dry season:	**Source of water**	From MIDC
	Fresh water (CMD):	400 cmd (as per Existing Consent to Operate)
	Recycled water - Flushing (CMD):	--
	Recycled water - Gardening (CMD):	--
	Swimming pool make up (Cum):	--
	Total Water Requirement (CMD) :	709 cmd
	Fire fighting - Underground water tank(CMD):	--
	Fire fighting - Overhead water tank(CMD):	--
	Excess treated water	Not applicable

Wet season:	**Source of water**	--
	Fresh water (CMD):	--
	Recycled water - Flushing (CMD):	--
	Recycled water - Gardening (CMD):	--
	Swimming pool make up (Cum):	--
	Total Water Requirement (CMD) :	--
	Fire fighting - Underground water tank(CMD):	--
	Fire fighting - Overhead water tank(CMD):	--
	Excess treated water	--
Details of Swimming pool (If any)	Not applicable	

24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	17	0	17	7	0	7	10	0	10
Industrial Process	26	80	106	0	0	0	26 + 19 (reaction water)	80+ 39 (reaction water)	164
Cooling tower & thermopack	303	277	580	136	176	312	167	101	268
Gardening	6	0	6	6	0	6	0	0	0

25.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	--
	Size and no of RWH tank(s) and Quantity:	Details given in EIA report.
	Location of the RWH tank(s):	Details given in EIA report.
	Quantity of recharge pits:	Details given in EIA report.
	Size of recharge pits :	Details given in EIA report.
	Budgetary allocation (Capital cost) :	5 Lakh
	Budgetary allocation (O & M cost) :	1 Lakh per Annum
	Details of UGT tanks if any :	Not Applicable

26.Storm water drainage	**Natural water drainage pattern:**	Not Applicable
	Quantity of storm water:	Not Applicable
	Size of SWD:	Not Applicable

27.Sewage and Waste water	**Sewage generation in KLD:**	10 cmd
	STP technology:	Sewage water will be treated in combined along with trade effluent in Effluent treatment plant.
	Capacity of STP (CMD):	Not Applicable
	Location & area of the STP:	Not Applicable
	Budgetary allocation (Capital cost):	Not Applicable
	Budgetary allocation (O & M cost):	Not Applicable

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	Minor quantity of debris will be generate.
	Disposal of the construction waste debris:	Construction debris will be disposed off as per norms.
Waste generation in the operation Phase:	**Dry waste:**	Fly ash: 11 TPD
	Wet waste:	Not Applicable
	Hazardous waste:	Spent carbon , Spent catalyst, Spent solvent, Discarded containers/ barrels/ drums/ liners, ETP sludge, Contaminated filters
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	Not Applicable
	Others if any:	Not Applicable
Mode of Disposal of waste:	**Dry waste:**	Ash will be sent to brick manufacturer.
	Wet waste:	Not Applicable
	Hazardous waste:	Hazardous waste will be disposed off as per Hazardous waste rule, 2016.
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	Not Applicable
	Others if any:	Not Applicable
Area requirement:	**Location(s):**	Details given in EIA report.
	Area for the storage of waste & other material:	Details given in EIA report.
	Area for machinery:	Details given in EIA report.
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	5 Lakh
	O & M cost:	100 Lakh per Annum

29.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	pH	--	4-10	7.5-8.0	7.5-8.0
2	Chemical Oxygen Demand	mg/L	5000	<250	250
3	Biological Oxygen Demand	mg/L	2200	<100	100
4	Total Dissolved solid	mg/L	1600	<1500	2100
5	Total Suspended Solid	mg/L	300-500	<100	100

Amount of effluent generation (CMD):	Total Effluent generated: 442 cmd, Effluent sent to ETP for treatment: 46 cmd, Loss from MEE unit- 7 cmd
Capacity of the ETP:	46 cmd of Effluent to Existing ETP, 145 cmd from Process to MEE plant (proposed), 186 cmd from Utilities to RO unit (proposed) [Refer EIA report]
Amount of treated effluent recycled :	389 cmd
Amount of water send to the CETP:	48.6 cmd (As per existing Consent to Operate)
Membership of CETP (if require):	Yes
Note on ETP technology to be used	1. RO (for CT/Boiler Blowdown) > RO rejects to MEE > RO permeate for recycle, 2. Stream I (Chloride rich) > MEE unit stage I > Condensate recycle to process/CT, 3. Stream II (Sulfate rich) > MEE stage IV > Condensate recycle to process/CT, 4. Stream III (low TDS) > Oil & Grease trap > Neutralization tanks > Primary clarifier > Aeration tank > secondary clarifier > Pre-filtered effluent tank > Sand filter > carbon filter > Filtered effluent tank > CETP
Disposal of the ETP sludge	ETP sludge will be sent to CHWTSDF facility.

30.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Spent carbon	28.3	TPA	240	140	380	CHWTSDF
2	Spent catalyst	28.2	TPA	1.8	2.2	4	CHWTSDF
3	Spent solvent	28.6	TPA	30	--	30	Sell to authorized party
4	Discarded containers/barrels /drums/liners	33.1	Nos. / A	600	600	1200	Sell to authorized party after decontamination
5	ETP sludge	35.3	TPA	78	12	90	CHWTSDF
6	Contaminated filter	33.2	TPA	0.9	0.9	1.8	Incineration at CHWTSDF

31.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	10 TPH Boiler (existing)	Coal: 30 TPD + 5 TPD (additional)	1	35	0.6	120
2	Boiler (existing)	Furnace oil: 1.2 KL/day	--	combined stack with 10 TPH boiler	combined stack with 10 TPH boiler	--
3	DMU scrubber (existing)	--	2	18 ft.	--	ambient temp.
4	Nitroso urasil reactor (existing)	--	3	18 ft	--	ambient temp.
5	CAA reactor (existing)	--	4	18 ft	--	ambient temp.
6	600 KVA DG set (existing)	HSD: 150 Lit/day	5	5	0.3	90

32.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Coal	30 TPD	5 TPD	35 TPD
2	Furnace oil	1.2 KL/day	--	FO fired boiler will be discontinued for proposed project
3	HSD	150 Lit/day	--	150 Lit/day
Source of Fuel		From nearby vendor		
Mode of Transportation of fuel to site		By road		

33.Energy

Power requirement:	**Source of power supply :**	From MSEDCL
	During Construction Phase: (Demand Load)	Power requirement during construction phase will be fulfilled from existing facility.
	DG set as Power back-up during construction phase	Existing: 600 KVA DG set (in case of emergency)
	During Operation phase (Connected load):	Additional power requirement: 550 KVA
	During Operation phase (Demand load):	Additional power requirement: 550 KVA
	Transformer:	Yes
	DG set as Power back-up during operation phase:	Existing: 600 KVA DG set (in case of emergency)
	Fuel used:	HSD: 150 Lit/day (in case of emergency)
	Details of high tension line passing through the plot if any:	Details given in EIA report

34.Energy saving by non-conventional method:

Details given in EIA report

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	--	--

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Air	Dust collector /Bag filter	Dust collector /Bag filter
Water	Effluent treatment plant	Upgradation of existing ETP, RO unit, MEE unit
Noise	Enclosure/ PPE	Enclosure/ PPE
Hazardous & Non-Hazardous waste	Disposed to CHWTSDF / Recycler	Disposed to CHWTSDF / Recycler

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	5 Lakh
	O & M cost:	1 Lakh per Annum

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	--	--	--

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Air pollution	Air pollution control	35	2.5
2	Water pollution	Water Pollution control	500	50
3	Noise pollution	Noise Pollution control	3	0.5
4	Monitoring	Environment Monitoring/management	--	5
5	Health & safety	Occupational Health & Safety	5	2
6	Green belt	Green Belt Development	--	1

7	Solid waste	Hazardous waste & Solid waste management	5	100
8	Green initiative	Rain water harvesting	5	1
9	Green initiative	Solar power / LED	5	1

39.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
30 % HCl	Existing	Near gate (west side)	20 KL	18 KL	5800 TPA	GACL/ ideal company	Tanker
DMS	Existing	Near gate (west side)	20 KL	18 KL	2100 TPA	sister company	Tanker
Acetic anhydride	Existing	Near gate (west side)	50 KL	45 KL	5000 TPA	Jubilant organics	Tanker
Caustic soda lye	Existing	Near gate (west side)	20 KL	18 KL	4500 TPA	GACL	Tanker
Formic acid	Existing	Near gate (west side)	20 KL	18 KL	2600 TPA	GNFC	Tanker
Acetic acid (95%)	Existing	Near gate (west side)	50 KL	45 KL	details given in EIA report	details given in EIA report	Tanker
Acetic acid (40%)	Existing	Near gate (west side)	20 KL	18 KL	details given in EIA report	details given in EIA report	Tanker
Recovered Solvent	Existing	Near gate (west side)	10 KL	8 KL	details given in EIA report	Inplant	Tanker

40.Any Other Information

No Information Available

	CRZ/ RRZ clearance obtain, if any:	Not Applicable
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	Not Applicable
	Category as per schedule of EIA Notification sheet	5(f)- B
	Court cases pending if any	Not Applicable
	Other Relevant Informations	Not Applicable
	Have you previously submitted Application online on MOEF Website.	Yes
	Date of online submission	19-08-2016

3. The proposal has been considered by SEIAA in its 121st 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:

Specific Conditions:

General Conditions:

I	(i)PP to achieve Zero Liquid Discharge ; PP shall ensure that there is no increase in the effluent load to CETP.
II	73 TPH boiler should have stack height of 68m and flue gases shall be passed through an ESP of 99.9% efficiency before being led into the 68 m stack.
III	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
IV	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
V	Proper Housekeeping programmers shall be implemented.
VI	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.
VII	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).
VIII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
IX	Arrangement shall be made that effluent and storm water does not get mixed.
X	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.
XI	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.
XII	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.
XIII	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.
XIV	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.
XV	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
XVI	(The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
XVII	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.
XVIII	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.
XIX	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

XX	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
XXI	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
XXII	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.
XXIII	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.
XXIV	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. SO2, 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.
XXV	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.
XXVI	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. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

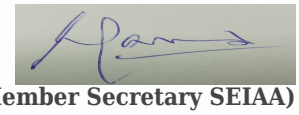
6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. 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.

9. 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.

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



Shri Satish.M.Gavai (Member Secretary SEIAA)

Copy to:

1. SHRI ANAND. B. KULKARNI, CHAIRMAN-SEIAA
2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC-I
3. SHRI JOHNY JOSEPH, CHAIRMAN-SEAC-II
4. SHRI ANIL .D. KALE. CHAIRMAN SEAC-III
5. SECRETARY MOEF & CC
6. IA- DIVISION MOEF & CC
7. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
8. REGIONAL OFFICE MOEF & CC NAGPUR
9. REGIONAL OFFICE MIDC TARAPUR
10. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
11. COLLECTOR OFFICE PALGHAR