STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date:July 3, 2020

To,
Aarti Industries Limited
at Plot No. A-94/1 & A-94/1/1, Khairane MIDC, TTC Industrial Area, Thane

Subject: Environment Clearance for Establishment of Pilot Plant and R&D for Synthetic Organic Chemicals 5(f) (Specialty chemicals, API & its formulation) by Aarti Industries Limited at Plot No. A-94/1 & A-94/1/1, Khairane MIDC, TTC Industrial Area, Navi Mumbai, Dist. Thane

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 183rd - Day-1rd 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 198th meetings.

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

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

1.Name of Project	Establishment of Pilot Plant and R&D for Synthetic Organic Chemicals 5(f) (Specialty chemicals, API & its formulation) by Aarti Industries Limited at Plot No. A-94/1 & A-94/1/1, Khairane MIDC, TTC Industrial Area, Navi Mumbai, Dist. Thane
2.Type of institution	Private
3.Name of Project Proponent	Aarti Industries Limited
4.Name of Consultant	Aditya Environmental Services Pvt Ltd
5.Type of project	Industrial Project, Category 5 (f)- B as per EIA notification 2006
6.New project/expansion in existing project/modernization/diversification in existing project	New Project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	Plot No. A-94/1 & A-94/1/1, Khairane MIDC, TTC Industrial Area, Thane
9.Taluka	Thane
10.Village	Kopar khairane
Correspondence Name:	Premnath R
Room Number:	--
Floor:	--
Building Name:	--
Road/Street Name:	--
Locality:	--
City:	--
11.Whether in Corporation / Municipal / other area	Khairane MIDC, TTC Industrial area

12.IOD/IOA/Concession/Plan Approval Number	Plot allotment from MIDC
	IOD/IOA/Concession/Plan Approval Number: Plot allotment from MIDC
	Approved Built-up Area:
13.Note on the initiated work (If applicable)	Not applicable
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Plot allotment from MIDC
15.Total Plot Area (sq. m.)	6576 sq. m.
16.Deductions	Not applicable
17.Net Plot area	Not applicable
18 (a).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.): 1362.84
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):** 1.5
	Approved Non FSI area (sq. m.): Not applicable
	Date of Approval: 13-05-2020
19.Total ground coverage (m2)	Not applicable
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	Not applicable
21.Estimated cost of the project	303000000

22.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Pilot Plant and R&D for synthetic organic chemicals (e.g. Specialty chemicals API and its formulations)	0	5	5

23.Total Water Requirement

Dry season:	**Source of water**	MIDC
	Fresh water (CMD):	95.4 cmd
	Recycled water - Flushing (CMD):	22.6 (Recycle for utilities)
	Recycled water - Gardening (CMD):	15 cmd
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	118 cmd
	Fire fighting - Underground water tank(CMD):	150 KL
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
Wet season:	**Source of water**	Not applicable
	Fresh water (CMD):	Not applicable
	Recycled water - Flushing (CMD):	Not applicable
	Recycled water - Gardening (CMD):	Not applicable
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	Not applicable
	Fire fighting - Underground water tank(CMD):	Not applicable
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
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	0	20	20	0	5	5	0	15	15
Industrial Process	0	15	15	0	2	2	0	13	13
Cooling tower & thermopack	0	72	72	0	62	62	0	10	10
Gardening	0	11	11	0	11	11	0	0	0

25.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	2 to 5 m bgl and 5 to 10 mbgl
	Size and no of RWH tank(s) and Quantity:	1 no. of 20m3 capacity RWH tanks
	Location of the RWH tank(s):	on plot 94/1/1
	Quantity of recharge pits:	Not applicable
	Size of recharge pits :	Not applicable
	Budgetary allocation (Capital cost) :	Rs. 10 Lakhs
	Budgetary allocation (O & M cost) :	Rs. 1 Lakhs
	Details of UGT tanks if any :	1 no. of 20m3 capacity RWH tanks
26.Storm water drainage	**Natural water drainage pattern:**	Towards MIDC road (front side)
	Quantity of storm water:	250 lit/sec
	Size of SWD:	600 mm x 800 mm
27.Sewage and Waste water	**Sewage generation in KLD:**	15 cmd
	STP technology:	Biological STP
	Capacity of STP (CMD):	15 cmd
	Location & area of the STP:	within plot
	Budgetary allocation (Capital cost):	Rs. 10 Lakhs
	Budgetary allocation (O & M cost):	Rs. 1 Lakhs

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	Minor quantity of debris/ Demolition waste
	Disposal of the construction waste debris:	Debris/ Demolition waste will be reused for leveling of plot
Waste generation in the operation Phase:	**Dry waste:**	Glass waste- 0.5 TPM, Paper Waste- 0.05 TPM, Cotton waste- 0.05 TPM, E-waste- 2 TPM
	Wet waste:	--
	Hazardous waste:	ETP Waste, Process residue & waste Residue, 30% HCl, Used oil, Spent Carbon and filter medium, Spent Acid, CaCl2 Solution, Empty barrels/ Carboys/ containers / Empty glass bottles/ liners contaminated with hazardous chemicals / waste, Spent Catalyst, Spent Solvent, Inorganic Salt, Off specification products
	Biomedical waste (If applicable):	--
	STP Sludge (Dry sludge):	Yes.
	Others if any:	--
Mode of Disposal of waste:	**Dry waste:**	Sale to MoEFCC/ SPCB authorized recyclers / party
	Wet waste:	--
	Hazardous waste:	CHWTSDF/ Sale to authorized Re processor
	Biomedical waste (If applicable):	--
	STP Sludge (Dry sludge):	Will be used onsite as manure
	Others if any:	--
Area requirement:	**Location(s):**	Within plot
	Area for the storage of waste & other material:	near ETP area
	Area for machinery:	Not applicable
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 10 Lakh
	O & M cost:	Rs. 10 Lakhs per annum

29.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	pH	--	5.5- 9	6.5 to 9	6.5 to 9
2	Oil and grease	mg/lit	15	< 10	< 10
3	BOD	mg/lit	1000	< 100	< 100
4	TSS	mg/lit	300	< 100	< 100
5	COD	mg/lit	2500	< 250	< 250
6	TDS	mg/lit	4000	< 2100	< 2100

Amount of effluent generation (CMD):	23 cmd
Capacity of the ETP:	20 KLD ETP, 5 KLD MEE/ATFD, 2 nos RO (20 KL & 15 KL)
Amount of treated effluent recycled :	22.6 cmd
Amount of water send to the CETP:	Nil. Unit will be Zero Liquid discharge facility.
Membership of CETP (if require):	--
Note on ETP technology to be used	Low COD & TDS effluent to ETP comprising of Primary, secondary and tertiary treatment. High COD & TDS effluent to RO, MEE & ATFD.
Disposal of the ETP sludge	ETP sludge will be sent to CHWTSDF for disposal.

30.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	ETP sludge, MEE salts	35.3	TPM	--	13	13	CHWTSDF
2	Process residue & waste	28.1	TPM	--	1	1	CHWTSDF
3	Residue	28.1	TPM	--	1	1	CHWTSDF
4	30% HCl	26.3	TPM	--	1.5	1.5	Authorised reprocessor/recycler
5	Used oil	5.1	TPM	--	1	1	Authorised reprocessor/recycler
6	Spent Carbon and filter medium	36.2	TPM	--	1	1	CHWTSDF
7	Spent Acid	26.3	TPM	--	2	2	Authorised reprocessor/recycler
8	CaCl2 Solution	--	TPM	--	1	1	Authorised reprocessor/recycler
9	Empty barrels/ Carboys/ containers /Empty glass bottles / liners contaminated with hazardous chemicals/ waste	33.1	Nos/ month	--	1000	1000	Authorised reprocessor/recycler
10	Spent Catalyst	26.5	TPM	--	0.5	0.5	Authorised reprocessor/recycler
11	Spent Solvent	20.2	TPM	--	1	1	CHWTSDF/Authorized reprocessor
12	Inorganic Salt	B15	TPM	--	1	1	CHWTSDF
13	Off specification products	28.4	TPM	--	1	1	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	Boiler (2 TPH steam)	Natural Gas: 3400 Nm3/day Or Furnace oil: 3200 Kg/day with scrubber (In case of unavailability of NG)	1	30	0.45	150
2	DG set (750 KVA)	HSD- 225 Lit/Hr	2	5.5 above roof	0.2	150
3	DG set (750 KVA)	HSD- 225 Lit/Hr	3	5.5 above roof	0.2	150
4	Acidic gases vent	--	4	11	As per std	As per std
5	Alkaline gases vent	--	5	11	As per std	As per std

32.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Natural gas	--	3400 Nm3/ Day	3400 Nm3/ Day
2	Furnace oil	--	3200 kg/ day	3200 kg/ day

3	HSD	--	450 Lit/ Hr	450 Lit/ Hr
33.Source of Fuel		From nearby source		
34.Mode of Transportation of fuel to site		By road		

35.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	2000 KVA
	DG set as Power back-up during construction phase	2 DG sets (750 KVA each)
	During Operation phase (Connected load):	2000 KVA (proposed)
	During Operation phase (Demand load):	2000 KVA
	Transformer:	Not applicable
	DG set as Power back-up during operation phase:	2 DG sets of 750 KVA each
	Fuel used:	HSD for DG sets
	Details of high tension line passing through the plot if any:	Not applicable

Energy saving by non-conventional method:

Solar panel installation: 50 KW capacity

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Not applicable	Not applicable

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Air emissions	--	Stack height, Scrubber for boiler in case of use of Furnace oil, Scrubbers for process emissions
Effluent generation	--	ETP, RO, MEE & ATFD, STP
Hazardous waste	--	CHWTSDF, Authorized reprocessors

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	EMP budget capital cost: 457 lakhs
	O & M cost:	EMP budget O&M cost: 122 lakhs 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 Control	From Utilities, Process and DG set	12	12
2	Environmental Monitoring	Environmental Monitoring	0	10
3	Water Pollution Control	ETP, RO, MEE & ATFD, STP	250	50
4	Hazardous Waste and Solid waste management	Storage and Disposal of Hazardous waste and Non hazardous waste	10	10
5	Green Belt Development	Development and Maintenance of Green Belt	20	12
6	Occupational Health and Safety	PPE, Safety Tanning	128	25
7	Green initiative	Solar panel installation	27	2
8	Green initiative	Rain water harvesting	10	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
Furnace oil	proposed	Within plot	5	3	96	Local	By road

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, Synthetic organic chemical manufacturing facility
	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	05-02-2019

3. The proposal has been considered by SEIAA in its 198th 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:

I	PP to implement the Guidelines for restoration of manufacturing industries after lockdown period issued by Ministry of Home Affairs, National Disaster Management Authority on 09.05.2020.
II	PP to provide adequate capacity scrubbers to the process vents to mitigate air pollution.
III	PP to obtain CHWTSDF permission before commissioning of the project.
IV	PP to provide Continuous Emission Monitoring System (CEMS) for monitoring of air emissions and connect the same to the MPCB and CPCB servers.
V	PP to provide sewage treatment plant for the treatment of domestic sewage generated on site.
VI	PP to implement CER plan in consultation with the District Authority as per OM issued by MoEF&CC dated 01.05.2018.
VII	PP has submitted the plan layout to MIDC, if there is any change plan layout PP have to take revised EC.
VIII	PP to submit MIDC Approval.
IX	PP to ensure that CER plan gets approved from District Collector.
X	PP to ensure to comply with the conditions stipulated in the Office Memorandum issued by MoEF& CC dated 9th August, 2018.

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	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
III	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
IV	Proper Housekeeping programmers shall be implemented.
V	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.
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).
VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
VIII	Arrangement shall be made that effluent and storm water does not get mixed.

IX	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.
X	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.
XI	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.
XII	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.
XIII	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.
XIV	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
XV	(The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
XVI	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.
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	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
XX	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
XXI	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.
XXII	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.
XXIII	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.
XXIV	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.
XXV	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. Anil Diggikar (Member Secretary SEIAA)

Copy to:

1. SECRETARY MOEF & CC

2. IA- DIVISION MOEF & CC

3. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI

4. REGIONAL OFFICE MOEF & CC NAGPUR

5. MUNICIPAL COMMISSIONER THANE

6. REGIONAL OFFICE MPCB THANE

7. REGIONAL OFFICE MIDC AMBERNATH

8. REGIONAL OFFICE MIDC THANE

9. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD

10. COLLECTOR OFFICE THANE