



No. SEIAA/GUJ/EC/5(f)/ 662/2018

Date: 30 JUN 2018

By R P A D

Sub: Environment Clearance to Yasho Industries Private Limited (Unit-II), for setting up of expansion in manufacturing of 'Synthetic Organic Chemicals' plant at Plot No. 1713, 3<sup>rd</sup> Phase, Notified Industrial Area, GIDC Vapi, District - Valsad. In Category 5(f) of Schedule annexed with EIA Notification dated 14/09/2006. Time Limit

Ref: Your Proposal No. SIA/GJ/IND2/21237/2017.

Dear Sir,

This has reference to your application along with EIA report dated 01/01/2018 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 09/03/2018 to the SEAC.

The proposal is for Environmental Clearance to Yasho Industries Private Limited (Unit-II), for setting up of expansion in manufacturing of 'Synthetic Organic Chemicals' plant at Plot No. 1713, 3<sup>rd</sup> Phase, Notified Industrial Area, GIDC Vapi, District - Valsad. It is an existing unit for manufacturing following products, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:

Sr No	Product	CAS No.	MT/month			End-Use
			Existing	Proposed	Total	
1.	Zinc dibenzylthiocarbamate (QUREACC ZBEC)	14726-36-4	20	30	50	Rubber chemicals and speciality chemical products are especially used in tyre, surgical, lubricants industries, food and anti-oxidants, flavour & fragrance etc. industries
2.	Copper Dibutylthiocarbamate (QUREACC CDBC)	13927-71-4	20	5	25	
3.	Copper dimethyldithiocarbamate (QUREACC CDMC)	137 - 29 - 1	1	4	5	
4.	Nickel dibutylthiocarbamate (QUREANTI NDBC)	13927-77-0	2	3	5	
5.	5-Methoxy-2-mercaptobenzimidazole (5-MMBI)	37052-78-1	0	30	30	
6.	2-Mercaptobenzimidazole (QUREANTI MB)	137 - 29 - 1	0	15	15	
7.	Zinc 2-Mercaptobenzimidazole (QUREANTI ZMB)	3030-80-6	0	5	5	
8.	Zinc salt of 4 and 5, methyl 2-mercaptoBenzimidazole (QUREANTI ZMMB)	61617 - 00 - 3	0	30	30	
9.	Zinc diethyldithiocarbamate (QUREACC ZDC)	136-94-7	0	50	50	
10.	Zinc dibutylthiocarbamate (QUREACC ZDBC)	136-23-2	0	50	50	
11.	Zinc dimethyldithiocarbamate (QUREACC ZDMC)	137-30-4	0	50	50	
12.	Zinc ethylphenyldithiocarbamate (QUREACC ZEPC)	14634-93-6	0	10	10	
13.	Zinc Pentamethylenedithiocarbamate (QUREACC ZPD)	13878-54-1	0	5	5	
14.	Bismuth dimethyldithiocarbamate (BIDD)	21260-46-8	0	3	3	
15.	Iron Dimethyldithiocarbamate (YAPOX IDMC)	14484-64-1	0	5	5	
16.	Sodium Dibutylthiocarbamate	136 - 30 - 1	0	10	10	



	(QUREACC SDBC)				
17.	Sodium Dimethyldithiocarbamate (YAPOX SDMC)	128-04-1	0	50	50
18.	Molybdenum Di (2- Ethylhexyl) Phosphorodithioate (YALUB LA)	68958-92-9	0	20	20
19.	Molybdenum Di tri Decylamine thioCarbamate (YALUB 822M )	71342 - 89 - 7	0	25	25
20.	Molybdenum Di tri Decylamine thioCarbamate (YALUB 525- S )	---	0	5	5
21.	Molybdenum Di butyl Di thioCarbamate (YALUB MDBC)	68412 - 26 - 0	0	20	20
22.	DipentamethyleneThiuramTetrasulphide (QUREACC DPTT)	120-54-7	0	50	50
23.	Dimethyl DiphenylThiuram Disulphide ( QUREACC MPTD)	53880-86-7	0	10	10
24.	TetrabenzylthiuramDisulfide (QUREACC TBzTD)	10591-85-2	0	100	100
25.	Tetrabutylthiuram disulphide (QUREACC TBTD )	1634-02-2	0	10	10
26.	TetraethylthiuramDisulfide (QUREACC TETD)	97-77-8	0	5	5
27.	Zinc mercaptobenzothiazole (ZMBT)	155-04-4	0	25	25
28.	N-tert-Butyl-bis (2- BENZO THIAZOLE SULFEN) amide (QUREACC TBSI)	3741-80-8	0	25	25
29.	2,4,6-trimercapto-s-triazole (QUREACC TST)	638-16-4	0	2.5	2.5
30.	Hydroquinone Ethoxylated ether (YAPOX CL-30/10)	104-38-1	0	100	100
31.	Triallylcynurate (QUREACC TAC )	101-37-1	0	10	10
32.	Triallylisocynurate (QUREACC TAIC )	1025-15-6	0	10	10
33.	Molybdenum di ThioCarbamate (YALUB - 3000D )	71342 - 89 - 7	0	25	25
34.	4,4-methylene bis [butyl dithiocarbamate] (YALUB 44-MBC)	10254-57-6	0	50	50
35.	DiphenylThiourea (QUREACC DPTU )	102 - 08 - 9	0	5	5
36.	2,5-bis(octyldithio)-1,3,4 thiadiazole (YALUB DM-86)	13539 - 13 - 4	0	10	10
37.	Tolytriazole-formaldehyde-bis [2-ETHYLHEXYL] Amine (YALUB TT-33)	94270 - 86 - 7	0	100	100
38.	Organomolybdenum complex of organic amide (YALUB M-85)	445409-27-8	0	50	50
39.	Zinc benzenesulphinat dehydrate (YAPOX ZBS)	24308-84-7	0	25	25
40.	2,2-dithio bis -benzaniilide (QURECIT-DBD)	135-57-9	0	100	100
41.	Zinc Diamyldithiocarbamate (YALUB AZ )	15337-18-5	0	15	15
42.	2,5-dimercapto-1,3,4- thiadiazole (YALUB DMTD)	1072-71-5	0	10	10
43.	ButylatedOctylated diphenylamine (YALUB BODPA)	68411-46-1	0	150	150
44.	Di Nonylated di phenyl amine (YALUB DND)	36878-20-3	0	150	150
45.	Octylated diphenylamine (QUREANTI OCD)	15721-78-5	0	75	75
46.	Aromatic derivative of diphenylamine (QUREANTI ADA)	10081-67-1	0	50	50



47.	Octylated-n-phenyl-1-naphthylamine (NA-06)	68259-36-9	0	10	10	
	<b>Total</b>		<b>43</b>	<b>1597.5</b>	<b>1640.5</b>	

The project activity is covered in 5(f) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 18/06/2018 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 17/04/2018. The proposal was considered by SEIAA, Gujarat in its meeting held on 28/06/2018 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

**A. CONDITIONS :**

**A. 1 SPECIFIC CONDITION :**

- Spent solvents (775 KL/Annum) shall be recovered by in-house distillation in such a manner that recovery shall not be less than 95 percent and recovered solvent shall be completely reused in the process.
- Unit shall comply all the conditions & recommendations mentioned in the guidelines for the management of the spent solvents published by GPCB in letter and spirit.
- Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.
- Unit shall provide Continuous Emission Monitoring System [CEMS] and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
- All measures shall be taken to prevent soil and ground water contamination.

**A. 2 WATER :**

- Total water requirement for the project shall not exceed 210.5 KLD. Unit shall reuse 95.04 KLD of MEE Condensate shall be reused for process and hence, fresh water requirement shall not exceed 115.46 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
- No ground water shall be tapped for the project requirements.
- The industrial effluent generation from the project shall not exceed 108 KL/day.
- Total effluent shall be subjected to in-house MEE (Cap.: 108 KLD) Condensate shall be reused for industrial purpose.
- Complete ZLD shall be maintained at all the time.
- The unit shall provide adequate MEE and it shall be operated regularly and efficiently so as to achieve ZLD all the time.
- The domestic wastewater generation shall not exceed 10 KL/day for proposed project and it shall be disposed off into soak pit system.
- Proper logbook for qualitative and quantitative data of waste water to be treated shall be maintained and shall be furnished to the GPCB from time to time.

**A. 3 AIR:**

- Unit shall not exceed fuel consumption as mentioned below:

Sr. no.	Source of emission With Capacity e.g. Boiler (8 TPH)	Existing or Proposed	Stack Height (meter)	Name of the fuel	Quantity of Fuel MT/hr & MT/Day	Type of emissions i.e. Air Pollutants	APCM
1	Steam Boiler (2 TPH)	proposed	11	Natural Gas/FO	160 SCM/h/120 kg/h	PM, SO <sub>2</sub> NO <sub>x</sub>	Adequate stack height
2	Thermopak: I (15 lakhs k cal)	Existing	30	Natural gas	120 SCM/h	PM, SO <sub>2</sub> NO <sub>x</sub>	Adequate stack height
3	Thermopak: II (6 lakhs k cal)	Existing	30	Natural gas	80 SCM/h	PM, SO <sub>2</sub> NO <sub>x</sub>	Adequate stack height
4	Thermopak: III (15 lakhs k cal)	Proposed	30	Natural gas	120 SCM/Hr	PM, SO <sub>2</sub> NO <sub>x</sub>	Adequate stack height
5	D G Set: I (1010 kVA)	Proposed	11	HSD	25 kg/h	PM, SO <sub>2</sub> NO <sub>x</sub>	Adequate stack height

- Unit shall provide adequate APCM for flue gas generation sources as mentioned above:
- Unit shall provide adequate APCM for process gas generation sources as mentioned below:

Sr. no.	Source of emission	Existing or proposed	Type of emission	Stack/Vent Height (meter)	APCM
1.	Spin Flash dryer (250 kg/h)	Existing	PM	11	Inbuilt cyclone separator and bag filter
2.	Spin Flash dryer (250 kg/h)	Proposed	PM	11	Inbuilt cyclone separator and bag filter
3.	Pulveriser (250 kg/h)	Existing	PM	11	Bag filter
4.	Pulveriser (250 kg/h)	Proposed	PM	11	Bag filter
5.	Rector	Proposed	H <sub>2</sub> S	11	Two stage alkali scrubber
6.	Rector	Proposed	H <sub>2</sub>	11	Water scrubber

17. Measures shall be taken to reduce the process vapors emissions as far as possible.
18. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.
- Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
  - Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
  - A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive transport dust emission.
19. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
20. For control of fugitive emission, VOCs, following steps shall be followed :
21. Closed handling and charging system shall be provided for chemicals.
22. Reflux condenser shall be provided over Reactors/ Vessels.
23. Pumps shall be provided with mechanical seals to prevent leakages.
24. Solvent stripper shall be provided and minimum 97% of solvent recovery shall be carried out.
25. Airborne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosures.
26. Regular monitoring of ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, H<sub>2</sub>S and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.



#### A. 4 SOLID / HAZARDOUS WASTE:

27. Hazardous / Solid waste management shall be as below:

S. No.	Type of Hazardous waste	Category as H/W rules 2016	Treatment	Disposal
1.	Waste from ETP and salt from MEE	Sch: I, 35.3	Packed in HDE bags, stored	Dispose off into TSDF Vapi and SEPPL, Kutch
2.	Spent/used Carbon	Sch: I, 28.3	Packed in HDPE drums	Send for co-processing to M/s RSPL, Panoli
3.	Spent solvent	Sch: I, 28.6	Distilled and recycled	Store and Recycle in the process
4.	Distillation Residue	Sch: I, 28.1	Packed in HDPE drums	Send for co-processing to M/s RSPL, Panoli
5.	Used Oil	Sch: I, 5.1	Packed in HDPE drum	Send for co-processing to M/S RSPL, Panoli
6.	Discarded containers	Sch I: 33.1	Washed and stored	Utilized for packing of hazardous waste or sell to authorized recycler
7.	Oily rags/cotton waste	Sch: I, 33.2	Collected, stored	Send for co-processing to M/s RSPL, Panoli

#### A. 5 OTHER:

28. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Eco Chem Sales & Services, Surat was submitted by project proponent vide letter

no. NIL dated 01/01/2018 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.

## **B. GENERAL CONDITIONS:**

### **B.1 CONSTRUCTION PHASE:**

29. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
30. Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
31. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
32. First Aid Box shall be made readily available in adequate quantity at all the times.
33. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local by-laws of concern authority shall be complied in letter and spirit.
34. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
35. Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
36. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
37. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
38. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.
39. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
40. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.

### **B.2 OPERATION PHASE:**

#### **B.2.1 WATER:**

41. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
42. All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.

#### **B.2.2 AIR:**

43. Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
44. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
45. Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.
46. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

#### **B.2.3 HAZARDOUS/SOLID WASTE:**

47. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
48. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
49. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
50. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
51. The design of the Trucks/tankers shall be such that there is no spillage during transportation
52. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
53. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be



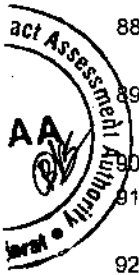
- g. Recycling of washes to subsequent batches.
- h. Recycling of steam condensate.
- i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation.
- j. Regular preventive maintenance for avoiding leakage, spillage etc.

**B.2.7 GREEN BELT AND OTHER PLANTATION:**

- 78. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
- 79. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

**B.3 OTHER CONDITION:**

- 80. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
- 81. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.
- 82. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
- 83. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- 84. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- 85. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- 86. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 87. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
- 88. During material transfer there shall be no spillages and gulland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
- 89. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 90. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
- 91. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 92. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 93. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- 94. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
- 95. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- 96. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
- 97. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.



98. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
99. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
100. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
101. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
102. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
103. This environmental clearance is valid for seven years from the date of issue.
104. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
105. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,  
Yours sincerely,

  
(ANJANA CHRISTIAN)  
Member Secretary



**Issued to:**  
**Yasho Industries Private Limited (Unit-II),**  
**Plot No. 1713, 3rd Phase, Notified Industrial Area,**  
**GIDC Vapi, District - Valsad**