

S. M. SAIYAD, IFS  
MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(f)/ 1382/2019

Date: 4 NOV 2019 By R P A D

Time Limit

Sub: Environment Clearance to M/s. Sahyog Pharma Chem Pvt Ltd for setting up of Synthetic Organic Chemicals manufacturing plant at Plot No.: 1/1+2/C, Near Jayhind Agrico, GIDC kalol, Ta -Kalol, Dist – Gandhinagar. In Category 5(f) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/IND2/29792/2016.

Dear Sir,

This has reference to your application along with EIA report dated 10/07/2019 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance to M/s. Sahyog Pharma Chem Pvt Ltd for setting up of Synthetic Organic Chemicals manufacturing plant at Plot No.: 1/1+2/C, Near Jayhind Agrico, GIDC kalol, Ta -Kalol, Dist – Gandhinagar. It is a proposed unit for manufacturing following products, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:

Sr. No.	Name of the Products	CAS no. /CI no.	Quantity MT/Month	End-use of products
1	2-Chloro Para Phenylene Diamine	615-66-7	10	Used for manufacturing of Pharmaceuticals & Dyes products
2.	Para- Amino Benzoic Acid OR 4-Chloro-3-Amino Benzoic Acid	150-13-0/ 2840-28-0	9	
3.	4 Chloro 2 Amino Phenol OR 4 Nitro 2 Amino Phenol & 4 Nitro 2 Amino Phenol 6 Sulfonic Acid	95-85-2 99-57-0 96-93-5	12  20	
Total			39 (maximum)	

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 05/09/2019 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 13/08/2019. The proposal was considered by SEIAA, Gujarat in its meeting held on 20/09/2019 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:**

- Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.
  - Entire quantity of Mother Liquor generated from 4 Nitro 2 Amino Phenol 6 Sulfonic Acid shall be used for manufacturing sodium thio sulphate and sodium thio sulphate will be sold to end-users having Rule-9 permission/will be sent to M/s Chhatral Enviro Management System Pvt. Ltd. (CEMSPL) for spray drying.
  - All measures shall be taken to prevent soil and ground water contamination.
- The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.
- The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
- National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G. S. R. 608 (E) dated 21/07/2010 and amended from time to time shall be followed.



7. Unit shall explore the possibilities for environment friendly methods for disposal of Incinerable & land fillable wastes before sending to CHWIF/TSDF sites.
8. Unit shall adopt proper methods for segregation of waste water streams based on characteristics at source and its sound management keeping in view direction under section 18 (1) (b) of the Water (Prevention and Control of Pollution) act, 1974 issued by CPCB regarding compliance of CETP.
9. Unit shall send waste water to Common spray dryer only after achieving inlet norms to Common spray dryer prescribed by GPCB ensuring content of effluent for COD so as not to get air borne during spray drying after APCM in order to achieve no adverse impacts on Environment and Human Health.
10. Unit shall prepare Standard Operating Procedures (SOPs) for spray Dryers and it shall be implemented in letter and spirit.

#### **A. 2 WATER :**

11. Total water requirement for the project shall not exceed 11.6 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
12. No ground water shall be tapped for the project requirements.
13. The industrial effluent generation from the project shall not exceed 9.7 KL/day.
14. Total 9.7 KLD industrial effluent shall be treated in primary, secondary and Tertiary ETP units and treated effluent shall be sent to CETP of GIDC Kalol for further treatment and disposal.
15. 1.5 KLD domestic sewage shall be disposed off through soak pit and septic tank system.
16. The unit shall provide metering facility at the inlet and outlet of the ETP and maintain records for the same.
17. Proper logbooks of ETP, CETP discharge, chemical consumption, power consumption, reuse etc. shall be maintained and shall be furnished to the GPCB from time to time.

#### **A. 3 AIR:**

18. Unit shall not exceed fuel consumption for Boiler , thermic fluid heater as mentioned below:

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Steam Boiler (0.6 TPH)	15	Briquettes OR Bio Coal	1.3 MT/Day OR 1.1 MT/Day	SPM SO <sub>2</sub> NO <sub>x</sub>	Dust collector followed by Multi cyclone Separator & Bag filter
2	Thermic Fluid Heater (Cap:- 2.0 Lacs K cal /hr)	15	Briquettes OR Bio Coal	1 MT/Day OR 0.9 MT/Day	SPM SO <sub>2</sub> NO <sub>x</sub>	Dust collector followed by Multi cyclone Separator & Bag filter

19. Unit shall provide adequate APCM with flue gas generation sources as mentioned above:
20. There shall be no process gas emission from manufacturing process.
21. 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.
22. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
23. For control of fugitive emission, VOCs, following steps shall be followed :
  - a. Closed handling and charging system shall be provided for chemicals.
  - b. Reflux condenser shall be provided over Reactors / Vessels.
  - c. Pumps shall be provided with mechanical seals to prevent leakages.
  - d. Air borne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosures.
24. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, HC, CO 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:**

25. All the hazardous waste management shall be taken care as mentioned below:

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/ Annum)	Management of HW
1	ETP Waste	Effluent Treatment plant	35.3	60	Collection, storage and disposal to the approved TSDF Site
2	Discarded Plastic Bags/drums	Raw material Storage	33.1	6	Collection, storage and Reuse within premises/ sell to Authorized recycler
3	Used/Spent Oil	Plant Machinery	5.1	0.012	Collection, storage and Reuse within premises / Used for finished goods packing.
4	Inorganic Salt	1. 4- Nitro 2 Amino Phenol 2. 4- Nitro 2 Amino Phenol 6 Sulphonic Acid	--	10.92	Collection, storage and disposal to the approved TSDF Site
5	Organic Residue	2-Chloro Para Phynylene Diamine	--- 4.4	6.4	Collection, storage and disposal to the approved common incineration facility (CHWIF)
6	Iron Sludge	4-Chloro 2 amino Phenol (By Reduction Process)	--	432	Collection, storage, transportation and disposal to the approved Cement industries having Rule 9 permission or TSDF site
7	Sodium Thio Sulphate (Liquid)	4-Nitro 2 Amino Phenol & 4-Nitro 2 Amino phenol 6 Sulphonic Acid	--	696	Collection, storage and sell out to Actual users having Rule 9 permission / Send to Chhatral Environment Management System Pvt. Ltd for Spray drying

Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016.

**A. 5 OTHER:**

27. The project proponent shall allocate the separate fund of Rs. 3.06 lacs i.e. 2 % of the capital investment in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
28. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Bhagvati Enviro Care Pvt. Ltd and submitted by project proponent 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 bye-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. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
44. 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.
45. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
46. 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.
47. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

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

48. 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.
49. 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.
50. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
51. 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.
52. The design of the Trucks/tankers shall be such that there is no spillage during transportation
53. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
54. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

### **B.2.4 SAFETY:**

55. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
56. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
57. Main entry and exit shall be separate and clearly marked in the facility.
58. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.

59. Storage of flammable chemicals shall be sufficiently away from the production area.
60. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
61. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
62. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
63. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
64. Only flame proof electrical fittings shall be provided in the plant premises.
65. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
66. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
67. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
68. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
69. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
70. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
71. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
72. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
73. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
74. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
75. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.

#### **B.2.5 NOISE**

76. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

#### **B.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:**

The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.

78. The company shall undertake various waste minimization measures such as :
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw materials substitutes.
  - c. Use of automated and close filling to minimize spillages.
  - d. Use of close feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.
  - f. Use of high pressure hoses for cleaning to reduce wastewater generation.
  - 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:**

79. 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.
80. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

#### **B.3 OTHER CONDITION:**

81. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC

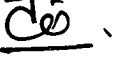


vide no. F. No. 22-34/2018-IA.III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. XX).

82. 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.
83. 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.
84. 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.
85. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
86. 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.
87. 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.
88. 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.
89. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
90. During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
91. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
92. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
93. 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.
94. 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.
95. 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.
96. 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.
97. 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.
98. 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.
99. 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 soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
100. 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.
101. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
102. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
103. 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.

104. 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.
105. This environmental clearance is valid for seven years from the date of issue.
106. 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.
107. 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,



(S. M. SAIYAD)  
Member Secretary

**Issued to:**  
**M/s. Sahyog Pharma Chem Pvt Ltd**  
**Plot No.: 1/1+2/C, Near Jayhind Agrico,**  
**GIDC kalol, Ta -Kalol, Dist – Gandhinagar**

