

## Action Taken Report

Sr. No.	Date	Events
1.		<p>Responsibilities of organization under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989:</p> <p>A. <b>Central Pollution Control Board or State Pollution Control Board</b> under Environment (Protection) Act, 1986 is responsible for Enforcement of directions and procedures in respect of <b>isolated storage of hazardous chemicals.</b></p> <p>B. Chief Inspector of Factories appointed under the Factories Act, 1948 is responsible for Enforcement of directions and procedures in respect of <b>industrial installations</b> and isolated storages covered under the Factories Act, 1948, dealing with hazardous chemicals and pipelines including inter-state pipelines regarding.</p> <p>C. The <b>Schedule-5</b> prescribing duties of authorities under Rule 2(b) and (3) is annexed herewith as <b>(Annexure-1)</b></p>
2.	08/05/2020	<p>(i) CPCB has issued circular on 08/05/2020 regarding strict safety precautions to be taken before resuming operation of units.</p> <p><b>(Annexure – 2)</b></p>

	<p>07/05/2020</p> <p>07/05/2020 22/06/2020</p>	<p>(ii) However, the GPCB has already issued an advisory on 07/05/2020 as a pre-emptive action to (1) Regional Officers/ Unit Heads for respective Regional Offices of GPCB and (2) The Director of Industrial, Safety &amp; Health (DISH).</p> <p><b>(Annexure – 3 &amp; 4)</b></p> <p>(iii) In context with above mentioned circular Regional Office, GPCB Vapi has sent an E-mail to DISH, Dist.- Valsad dated 07/05/2020 and 22/06/2020 regarding advisory as a pre-emptive action.</p> <p><b>(Annexure – 5A &amp; 5B)</b></p>
3.	08/08/2020	<p>Incident took place in M/s. Shakti Bioscience, Plot No:411/1, LIC Sector, GIDC Estate, Dist : Valsad due to short circuit in pharma plant.</p> <p><b>Time of incident: 11.30 am</b></p> <p><b>Regional Officials reached to incident site within 1 Hr &amp; Members of Local Crisis Group were also reached to site in due course of time.</b></p> <p>List of other department present at site:</p> <ol style="list-style-type: none"> <li>1) Sub Divisional Magistrate</li> <li>2) Police: DSP, Dy. SP, PI and his team</li> <li>3) DISH</li> <li>4) GIDC</li> <li>5) Vapi Industries association</li> <li>6) Mamlatdar Vapi</li> <li>7) Local Crisis Group</li> </ol> <p>Detailed inspection report is annexed as <b>Annexure-6.</b></p>

		<p>Accordingly GPCB has taken following steps during incident as a member of Local Crisis Group.</p> <ul style="list-style-type: none"><li>• GPCB has monitored Ambient Air Quality at two locations (i) Upstream and (ii) Downstream of wind direction.</li><li>• GPCB has monitored VOC by handy/ Portable VOC meter</li><li>• GPCB has taken water sample of contaminated wastewater</li><li>• VOC measurement carried out on portable VOC Analyzer. GPCB had also informed on site.</li></ul> <p>Results are annexed herewith as <b>Annexure-7A and Annexure-7B</b></p> <p><b><u>Permissions:</u></b></p> <p><b>Industry is having following statutory permission:</b></p> <ul style="list-style-type: none"><li>(i) Environment Clearance obtained from MoEF&amp; CC : Dated 08/07/2009 (<b>Annexure-8</b>)</li><li>(ii) Consent to operate (CC&amp;A- Consolidated Consent &amp; Authorization) given by GPCB is valid upto 31/12/2021 (<b>Annexure-9</b>)</li><li>(iii) Industry is having Public Liability Insurance policy valid up to 28/06/2021. (<b>Annexure-10</b>)</li><li>(iv) Unit has obtained permission to operate plant during lockdown from District collector on 11/04/2020. (<b>Annexure-11</b>)</li></ul>
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4.	14/08/2020	<p>GPCB has issued closure direction with immediate effect under Section 31 (A) of the Air Act-1981 as under:(<b>Annexure-12</b>)</p> <ol style="list-style-type: none"> <li>1. To prohibit you from the above said manufacturing activity.</li> <li>2. To close the operation of your industrial plant on the above mentioned premises.</li> <li>3. To direct the concerned authority to stop supply of electricity with the immediate effect.</li> <li>4. D.G. sets and emergency facility shall be operated for safety and security purpose to maintain the temperature of specific chemicals, operation of EMS with reference to Water, Air and Hazardous waste management.</li> <li>5. Unit shall submit Form-11 under Hazardous Waste Rules, 2016.</li> <li>6. Unit shall comply with conditions given by DISH &amp; unit shall submit DISH Report to Regional Office, Vapi and Head Office, Gandhinagar.</li> <li>7. To carry out Safety Audit/ HAZOP study (if applicable).</li> </ol>
	17/08/2020	<p>GPCB has imposed interim EDC as vide Letter dated 17/08/2020 to pay Rs. 25 Lakh as an Interim Environment Damage Compensation by RTGS immediately. (<b>Annexure-13</b>)</p>

		(Ref: Unit is categorized under Red-Small category, Point No. 4 of GPCB Environment Compensation Guideline “Assessment for levying of Environment Compensation in case of Industrial accident “)
	20/08/2020	Electric Supply and Water Supply connections have been disconnected dated 20/08/2020 by concern Authority. <b>(Annexure-14)</b>
	21/08/2020	<p><b>Inspection has been carried out by Regional Office on Dated 21/08/2020 after Closure Directions of the unit and found followings:</b></p> <ol style="list-style-type: none"> <li>1. During inspection unit is found not in operation. Power supply and water supply has been disconnected by concern authority dated 20/08/2020.</li> <li>2. Unit has disposed generated wastewater generated during fire fighting operation into CETP through Manifest System, which was on floor after fire. Entire quantity could not be transferred by unit as certain amount of fire fighting water went into open chamber of GIDC storm water drain during fire fighting.</li> <li>3. Unit has submitted Form-11 under Hazardous Waste Rules, 2016.</li> <li>4. Unit has paid Rs. 25/- Lakh as an Interim Environmental Damage Compensation vide UTR No. BCBMH20233905743 dated 21/08/2020.</li> </ol>

	21/08/2020	<p>5. Unit has been instructed to submit Safety Audit/ HAZOP study Report to RO- Vapi and Head office- Gandhinagar.</p> <p>6. Unit has been instructed to submit DISH Remarks/ Report immediately.</p> <p><b>(Annexure-15)</b></p> <p>M/S. Shakti Bio Science Ltd, Vapi has paid Rs. 25/- Lakh as an Interim Environmental Damage Compensation to GPCB as vide UTR NO: BCBMR22020082100905743 on dated 21/08/2020.</p>
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**THE MANUFACTURE, STORAGE AND IMPORT OF  
HAZARDOUS CHEMICAL RULES, 1989**

**MINISTRY OF ENVIRONMENT & FORESTS**

(Department of Environment, Forests and Wildlife)

**NOTIFICATION**

(New Delhi, the 27<sup>th</sup> November 1989)

**\*S.O.966(E)** - In exercise of the powers conferred by Section 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules, namely :

**1. SHORT TITLE AND COMMENCEMENT –**

(1) These rules may be called the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989.

(2) They shall come into force on the date of their publication in the Official Gazette.

**2. DEFINITIONS** - In these rules, unless the context otherwise requires, -

- (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (b) "Authority" means an authority mentioned in Column 2 of Schedule 5;
- (c) "export" with its grammatical variations and cognate expression, means taking out of India to a place outside India;
- (d) "exporter" means any person under the jurisdiction of the exporting country and includes the exporting country, who exports hazardous chemical;
- (e) "Hazardous Chemical " means -
  - (i) any chemical which satisfies any of the criteria laid down in Part I of <sup>1</sup>[Schedule 1 or] listed in Column 2 of Part II of this Schedule ;
  - (ii) any chemical listed in Column 2 of Schedule 2;
  - (iii) any chemical listed in Column 2 of Schedule 3;

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\* The principal rules were published in the Gazette of India vide number S.O. 966(E), dated 27.11.1989 and subsequently amended vide: S.O.115 (E), dated 05.02.1990; GSR 584, dated 09.09.1990; S.O.2882, dated 03.10.1994; and S.O. 57(E), dated 19.01.2000.

<sup>1</sup> Substituted by Rule 2(i) of the Manufacture, Storage and Import of Hazardous Chemical(Amendment) Rules, 2000 notified vide S.O. 57(E), dated 19.1.2000.

- (f) "import" with its grammatical variations and cognate expression, means bringing into India from a place outside India;
- (g) "importer" means an occupier or any person who imports hazardous chemicals;
- (h) "industrial activity" means-
- i. an operation or process carried out in an industrial installation referred to in Schedule 4 involving or likely to involve one or more hazardous chemicals and includes on-site storage or on-site transport which is associated with that operation or process, as the case may be; or
  - ii. isolated storage; or
  - iii. pipeline ;
- (i) "isolated storage" means storage of a hazardous chemical, other than storage associated with an installation on the same site specified in Schedule 4 where that storage involves atleast the quantities of that chemical set out in Schedule 2;
- <sup>1</sup>[(j) "major accident" means -an incident involving loss of life inside or outside the installation, or ten or more injuries inside and/or one or more injuries outside or release of toxic chemicals or explosion or fire or spillage of hazardous chemicals resulting in on-site or off-site emergencies or damage to equipment leading to stoppage of process or adverse affects to the environment ;
- (ja) "major accident hazards (MAH) installations" means - isolated storage and industrial activity at a site handling (including transport through carrier or pipeline) of hazardous chemicals equal to or, in excess of the threshold quantities specified in, Column 3 of schedule 2 and 3 respectively; ]

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<sup>1</sup> Substituted by Rule 2(ii) of the Manufacture, Storage and Import of Hazardous Chemical (Amendment)Rules, 2000 notified vide S.O.57(E), dated 19<sup>th</sup> January, 2000.

- (k) "pipeline" means a pipe (together with any apparatus and works associated therewith) or system of pipes (together with any apparatus and work associated therewith) for the conveyance of a hazardous chemical other than a flammable gas as set out in Column 2 of Part II of Schedule 3 at a pressure of less than 8 bars absolute; the pipeline also includes inter -state pipelines;
- (l) "Schedule" means Schedule appended to these rules;
- (m) "site" means any location where hazardous chemicals are manufactured or processed, stored, handled, used, disposed of and includes the whole of an area under the control of an occupier and includes pier, jetty or similar structure whether floating or not;
- (n) "Threshold quantity" means, -
- (i) in the case of a hazardous chemical specified in Column 2 of Schedule 2, the quantity of that chemical specified in the corresponding entry in Columns 3 and 4 ;
  - (ii) in the case of a hazardous chemical specified in Column 2 of Part I of Schedule 3, the quantity of that chemical specified in the corresponding entry in Columns 3 & 4 of that part;
  - (iii) in the case of substances of a class specified in Column 2 of Part II of Schedule 3, the total quantity of all substances of that class specified in the corresponding entry in Columns 3 and 4 of that part.

### <sup>1</sup>[3. DUTIES OF AUTHORITIES –

The concerned authority shall, -

- (a) inspect the industrial activity at least once in a calendar year;
- (b) except where such authority is the Ministry of Environment and Forests, annually report on the compliance of the rules by the occupiers to the Ministry of Environment and Forests through appropriate channel ;

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<sup>1</sup> Substituted by Rule 2 of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

- (c) subject to the other provisions of these rules, perform the duties specified in column 3 of Schedule 5.]

#### **4. GENERAL RESPONSIBILITY OF THE OCCUPIER DURING INDUSTRIAL ACTIVITY -**

(1) these rules shall apply to, -

- (a) an industrial activity in which a hazardous chemical, which satisfies any of the criteria laid down in Part I of Schedule 1<sup>1</sup>[or listed] in Column 2 of Part II of this Schedule is, or may be, involved; and

<sup>2</sup>[(b) isolated storage of a hazardous chemical listed in Schedule 2 in a quantity equal to or more than the threshold quantity specified in Column 3, thereof.]

(2) An occupier who has control of an industrial activity in terms of sub-rule (1) shall provide evidence to show that he has, -

- (a) identified the major accident hazards; and
- (b) taken adequate steps to -
- (i) prevent such major accidents and to limit their consequences to persons and the environment;
- (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety.

#### **4. NOTIFICATION OF MAJOR ACCIDENT -**

(1) Where a major accident occurs on a site or in a pipe line, the occupier shall <sup>3</sup>[within 48 hours notify] the concerned authority as identified in Schedule 5 of that accident, and furnish thereafter to the concerned authority a report relating to the accidents in installments, if necessary, in Schedule 6.

(2) The concerned authority shall on receipt of the report in accordance with sub-rule 1 of this rule, shall undertake a full analysis of the major accident and sent the <sup>4</sup>[requisite information within 90 days to the Ministry] of Environment and Forests through appropriate channel.

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<sup>1</sup> Substituted by Rule 3(i) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>2</sup> Substituted by Rule 3(ii), *ibid.*

<sup>3</sup> Substituted by Rule 3(a) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>4</sup> Substituted by Rule 3(b) *ibid.*

<sup>1</sup>[(3) An occupier shall notify to the concerned Authority, steps taken to avoid any repetition of such occurrence on a site.]

<sup>2</sup>[(4) The concerned Authority shall compile information regarding major accidents and make available a copy of the same to the Ministry of Environment & Forests through appropriate channel.

(5) The concerned Authority shall in writing inform the occupier, of any lacunae which in its opinion needs to be rectified to avoid major accidents.]

## **6. INDUSTRIAL ACTIVITY TO WHICH RULES 7 TO 15 APPLY -**

(1) Rules 7 to 15 shall apply to, -

- (a) an industrial activity in which there is involved a quantity of hazardous chemical listed in Column 2 of Schedule 3 which is equal to or more than the quantity specified in the entry for that chemical in Column 3 & 4 (Rules 10-12 only for Column 4); and
- (b) isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the quantity specified in the entry for that chemical in Column <sup>3</sup>[3 & 4 (rules 10-12 only for column 4).]

(2) For the purpose of rules 7 to 15,

- (a) "new industrial activity" means an industrial activity which, –
  - (i) commences after the date of coming into operation of these rules; or
  - (ii) if commenced before that date, is an industrial activity in which a modification has been made which is likely to cover major accident hazards, and that activity shall be deemed to have commenced on the date on which the modification was made;

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<sup>1</sup> Substituted by Rule 3(c) of the Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 1994 notified vide S.O. No.2882, dated 3.10.1994.

<sup>2</sup> Inserted by Rule 3(d); *ibid*.

<sup>3</sup> Substituted by Rule 4; *ibid*.

- (b) an "existing industrial activity" means an industrial activity which is not a new industrial activity.

## **7. <sup>1</sup>[APPROVAL AND] NOTIFICATION OF SITES -**

(1) An occupier shall not undertake any industrial activity <sup>2</sup>[unless he has been granted an approval for undertaking such an activity and has submitted] a written report to the concerned authority containing the particulars specified in Schedule 7 at least 3 months before commencing that activity or before such shorter time as the concerned authority may agree and for the purpose of this paragraph, an activity in which subsequently there is or is liable to be a threshold quantity or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified accordingly.

<sup>3</sup>(2) The concerned Authority within 60 days from the date of receipt of the report shall approve the report submitted and on consideration of the report if it is of the opinion that contravention of the provisions of the Act or the rules made thereunder has taken place, it shall issue notice under rule 19].

## **8. UPDATING OF THE SITE NOTIFICATION FOLLOWING CHANGES IN THE THRESHOLD QUANTITY -**

Where an activity has been reported in accordance with rule 7(1) and the occupier makes a change in it (including an increase or decrease in the maximum threshold quantity of a hazardous chemical to which this rule applies which is or is liable to be at the site or in the pipeline or at the cessation of the activity) which affects the particulars specified in that report or any subsequent report made under this rule, the occupier shall forthwith furnish a further report to the concerned authority.

## **9. TRANSITIONAL PROVISIONS-**

**Where. –**

- (a) at the date of coming into operation of these rules, an occupier is in control of an existing industrial activity which is required to be reported under rule 7(1); or

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<sup>1</sup> Substituted by Rule 5 of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

<sup>2</sup> Substituted by Rule 4 (a) of MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>3</sup> Substituted by Rule 4(b), *ibid.*

- (b) within 6 months after that date, an occupier commence any such new industrial activity;

it shall be a sufficient compliance with that rule if he reports to the concerned authority as per the particulars in Schedule 7 within 3 months after the date of coming into operation of these rules or within such longer time as the concerned authority may agree in writing.

#### **10. SAFETY REPORTS <sup>1</sup>[AND SAFETY AUDIT REPORTS] -**

(1) Subjects to the following paragraphs of this rule, an occupier shall not undertake any industrial activity to which this rule applies, unless he has prepared a safety report on that industrial activity containing the information specified in Schedule 8 and has sent a copy of that report to the concerned authority at least ninety days before commencing that activity.

(2) In the case of a new industrial activity which an occupier commences, or by virtue of sub-rule (2) (a) (ii) of rule 6 is deemed to commence, within 6 months after coming into operation of these rules, it shall be a sufficient compliance with sub-rule (1) of this rule if the occupier sends to the concerned authority a copy of the report required in accordance with that sub-rule within ninety days after the date of coming into operation of these rules.

<sup>2</sup>[(3) In case of an existing industrial activity, the occupier shall prepare a safety report in consultation with the concerned authority and submit the same within one year from the date of commencement of the Manufacture, Storage and Import of Hazardous Chemicals (Amendment) Rules, 1994 to the concerned Authority.]

<sup>3</sup>[(4) After the commencement of the Manufacture, Storage and Import of Hazardous Chemicals (Amendment) Rules, 1994, the occupier of both the new and the existing industrial activities shall carry out an independent safety audit of the respective industrial activities with the help of an expert, not associated with such industrial activities.

(5) The occupier shall forward a copy of the auditor's report along with his comments to the concerned Authority within 30 days after the completion of such Audit.]

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<sup>1</sup> Substituted by Rule 6 of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

<sup>2</sup> Substituted by Rule 5(a) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>3</sup> Inserted by Rule 5(b), *ibid*.

<sup>1</sup>[(6) The occupier shall update the safety audit report once a year by conducting a fresh safety audit and forward a copy of it with his comments thereon within 30 days to the concerned Authority.

(7) The concerned Authority may if it deems fit, issue improvement notice under rule 19 within 45 days of the submission of the said report.]

## **11. UPDATING OF REPORTS UNDER RULE 10-**

(1) Where an occupier has made a safety report in accordance with sub-rule (1) of rule 10 he shall not make any modification to the industrial activity to which that safety report relates which could materially affect the particulars in that report, unless he has made a further report to take account of those modifications and has sent a copy of that report to the concerned authority at least 90 days before making those modifications.

(2) Where an occupier has made a report in accordance with rule 10 and sub - rule (1) of this rule and that industrial activity is continuing the occupier shall within three years of the date of the last such report, make a further report which shall have regard in particular to new technical knowledge which has affected the particulars in the pervious report relating to safety and hazard assessment and shall within 30 days <sup>2</sup>[\*\*\*] send a copy of the report to the concerned authority.

## **<sup>3</sup>[12. REQUIREMENT FOR FURTHER INFORMATION TO BE SENT TO THE AUTHORITY -**

Where, in accordance with rule 10, an occupier has sent a safety report and the safety audit report relating to an industrial activity to the concerned Authority, the concerned Authority may, by a notice served on the occupier, require him to provide such additional information as may be specified in the notice and the occupier shall send that information to the concerned Authority within 90 days].

## **13. PREPARATION TO ON-SITE EMERGENCY PLAN BY THE OCCUPIER -**

(1) An occupier shall prepare and keep up-to-date <sup>4</sup>[an on-site emergency plan containing details specified in Schedule II and detailing] how major accidents will be dealt with on the site on which the industrial activity is carried

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<sup>1</sup> Inserted by Rule 5(b) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>2</sup> Omitted by Rule 6, *ibid.*

<sup>3</sup> Substituted by Rule 7, *ibid.*

<sup>4</sup> Substituted by Rule 8(a), *ibid.*

on and that plan shall include the name of the person who is responsible for safety on the site and the names of those who are authorized to take action in accordance with the plan in case of an emergency.

(2) The occupier shall ensure that the emergency plan prepared in accordance with sub-rule (1) takes into account any modification made in the industrial activity and that every person on the site who is affected by the plan is informed of its relevant provisions.

(3) The occupier shall prepare the emergency plan required under sub-rule (1),-

(a) in the case of a new industrial activity, before that activity is commenced;

(b) in the case of an existing industrial activity within 90 days of commencing into operation of these rules.

<sup>1</sup>[(4) The occupier shall ensure that a mock drill of the on-site emergency plan is conducted every six months;

(5) A detailed report of the mock drill conducted under sub-rule (4) shall be made immediately available to the concerned Authority.]

#### **14. PREPARATION OF OFF-SITE EMERGENCY PLAN BY THE AUTHORITY -**

(1) It shall be the duty of the concerned authority as identified in Column 2 of Schedule 5 to prepare and keep up-to-date <sup>2</sup>[an adequate off-site emergency plan containing particulars specified in Schedule 12 and detailing] how emergencies relating to a possible major accident on that site will be dealt with and in preparing that plan the concerned authority shall consult the occupier, and such other persons as it may deem necessary.

(2) For the purpose of enabling the concerned authority to prepare the emergency plan required under sub-rule (1), the occupier shall provide the concerned authority with such information relating to the industrial activity under his control as the concerned authority may require, including the nature, extent and likely effects off-site of possible major accidents and the authority shall

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<sup>1</sup> Inserted by Rule 8(b) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>2</sup> Substituted by Rule 9 (a), *ibid.*

provide the occupier with any information from the off-site emergency plan which relates to his duties under rule 13.

(3) The concerned authority shall prepare its emergency plan required under sub-rule (1),-

- (a) In the case of a new industrial activity, before that activity is commenced;
- (b) In the case of an existing industrial activity, within six months of coming into operation to these rules.

<sup>1</sup>[(4) The concerned authority shall ensure that a rehearsal of the off-site emergency plan is conducted at least once in a calendar year.]

## **15. INFORMATION TO BE GIVEN TO PERSONS LIABLE TO BE AFFECTED BY A MAJOR ACCIDENT -**

(1) The occupier shall take appropriate steps to inform persons outside the site either directly or through District Emergency Authority who are likely to be in an area which may be affected by a major accident about, -

- (a) the nature of the major accident hazard; and
- (b) the safety measures and the "Do's" and "Don'ts" which should be adopted in the event of a major accident.

(2) The occupier shall take steps required under sub-rule (1) to inform persons about an industrial activity, before that activity is commenced, except, in the case of an existing industrial activity in which case the occupier shall comply with the requirements of sub-rule (1) within 90 days of coming into operation of these rules.

## **16. DISCLOSURES OF INFORMATION -**

Where for the purpose of evaluating information notified under rule 5 or 7 to 15, the concerned authority discloses that information to some other person, that other person shall not use that information for any purpose except for the purpose of the concerned authority disclosing it, and before disclosing the information the concerned authority shall inform that other person of his obligations under this paragraph.

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<sup>1</sup> Inserted by Rule 9(b) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

## 17. COLLECTION, DEVELOPMENT AND DISSEMINATION OF INFORMATION -

(1) This rule shall apply to an industrial activity in which a hazardous chemical which satisfies any of the criteria laid down in part I of Schedule 1<sup>1</sup>[or listed] in Column 2 of Part II of this Schedule is or may be involved.

(2) An occupier, who has control of an industrial activity in term of sub-rule 1 of this rule, shall arrange to obtain or develop information in the form of safety data sheet as specified in Schedule 9. The information shall be accessible upon request for reference.

(3) The occupier while obtaining or developing a safety data sheet as specified in Schedule 9 in respect of a hazardous chemical handled by him shall ensure that the information is recorded accurately and reflects the scientific evidence used in making the hazard determination. In case, any significant information regarding hazard of a chemical is available, it shall be added to the material safety data sheet as specified in Schedule 9 as soon as practicable.

(4) Every container of a hazardous chemical shall be clearly labelled or marked to identify -

- (a) the contents of the container ;
- (b) the name and address of manufacturer or importer of the hazardous chemical ;
- (c) the physical, chemical and toxicological data as per the criteria given at Part I of Schedule 1.

(5) In terms of sub rule 4 of this rule where it is impracticable to label a chemical in view of the size of the container or the nature of the package, provision should be made for other effective means like tagging or accompanying documents.

## 18. IMPORT OF HAZARDOUS CHEMICALS -

(1) This rule shall apply to a chemical which satisfies any of the criteria laid down in Part I of Schedule 1<sup>2</sup>[or listed] in Column 2 of Part II of this Schedule.

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<sup>1</sup> Substituted by Rule 7 of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

<sup>2</sup> Substituted by Rule 8(a), *ibid.*

(2) Any person responsible for importing hazardous chemicals in India shall provide <sup>1</sup>[before 30 days or as reasonably possible but not later than] the date of import to the concerned authorities as identified in Column 2 of Schedule 5 the information pertaining to, -

- (i) the name and address of the person receiving the consignment in India;
- (ii) the port of entry in India;
- (iii) mode of transport from the exporting country to India;
- (iv) the quantity of chemical (s) being imported; and
- (v) complete product safety information.

<sup>2</sup>(3) If the Concerned Authority of the State is satisfied that the chemical being imported is likely to cause major accidents, it may direct the importer to take such safety measures as the concerned Authority of the State may deem appropriate.]

<sup>3</sup>[(3A) In case the concerned Authority of the State is of the opinion that the chemical should not be imported on safety or on environmental considerations, such Authority may direct stoppage of such import.]

(4) The concerned Authority at the State shall simultaneously inform the concerned Port Authority to take appropriate steps regarding safe handling and storage of hazardous chemicals while off-loading the consignment within the port premises.

(5) Any person importing hazardous chemicals shall maintain the records of the hazardous chemicals imported as specified in Schedule 10 and the records so maintained shall be open for inspection by the concerned authority at the State or the Ministry of Environment and Forests or any officer appointed by them in this behalf.

(6) The importer of the hazardous chemical or a person working on his behalf shall ensure that transport of hazardous chemicals from port of entry to the ultimate destination is in accordance with the Central Motor Vehicles Rules, 1989 framed under the provisions of the Motor Vehicles Act, 1988.

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<sup>1</sup> Substituted by Rule 10(a) of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>2</sup> Substituted by Rule 10(b), *ibid.*

<sup>3</sup> Inserted by Rule 10(c), *ibid.*

**19. IMPROVEMENT NOTICES -**

(1) if the concerned authority is of the opinion that a person has contravened the provisions of these rules, the concerned authority shall serve on him a notice ( in this para referred to as " an improvement notice") requiring that person to remedy the contravention or, as the case may be, <sup>1</sup>[the matters occasioning it within 45 days.]

(2) A notice served under sub-rule (1) shall clearly specify the measures to be taken by the occupier in remedying said contraventions.

**20. POWER OF THE CENTRAL GOVERNMENT TO MODIFY THE SCHEDULES -**

The Central Government may, at any time, by notification in the Official Gazette, make suitable changes in the Schedules.

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<sup>1</sup> Substituted by Rule 11 of MSIHC Rules, 1994 notified vide S.O.2882, dated 3.10.1994.

<sup>1</sup>[SCHEDULE 1]

[See rule 2e (i), 4 (1)(a), 4(2), 17 and 18]

**[Part -I]**

- (a) **Toxic Chemicals:** Chemicals having the following values of acute toxicity and which owing to their physical and chemical properties, are capable of producing major accident hazards:

S.No.	Toxicity	Oral toxicity LD <sub>50</sub> (mg/kg)	Dermal toxicity LD <sub>50</sub> (mg/kg)	Inhalation toxicity LC <sub>50</sub> (mg/l)
1.	Extremely toxic	>5	<40	<0.5
2.	Highly toxic	>5-50	>40-200	<0.5-2.0
3.	Toxic	>50-200	>200-1000	>2-10

- (b) **Flammable Chemicals :**

- (i) flammable gases: Gases which at 20°C and at standard pressure of 101.3KPa are :-

- (a) ignitable when in a mixture of 13 percent or less by volume with air, or ;
- (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limits.

**Note :** The flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organization ISO Number 10156 of 1990 or by Bureau of Indian Standard ISI Number 1446 of 1985.

- (ii) **extremely flammable liquids** : chemicals which have flash point lower than or equal to 23°C and boiling point less than 35°C.
- (iii) **very highly flammable liquids** : chemicals which have a flash point lower than or equal to 23°C and initial boiling point higher than 35°C.

<sup>1</sup> Substituted by Rule 9 of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

- (iv) **highly flammable liquids** : chemicals which have a flash point lower than or equal to 60°C but higher than 23°C.
- (v) **flammable liquids** : chemicals which have a flash point higher than 60°C but lower than 90°C.
- (c) **Explosives** : explosives mean a solid or liquid or pyrotechnic substance (or a mixture of substances) or an article.
  - (a) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings ;
  - (b) which is designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self sustaining exothermic chemical reaction.

**PART II**  
**LIST OF HAZARDOUS AND TOXIC CHEMICALS**

S. No.	NAME OF HAZARDOUS CHEMICALS	S. No.	NAME OF HAZARDOUS CHEMICALS
1.	Acetaldehyde	41.	Antimycin A
2.	Acetic acid	42.	ANTU
3.	Acetic anhydride	43.	Arsenic pentoxide
4.	Acetone	44.	Arsenic trioxide
5.	Acetone cyanohydrin	45.	Arsenous trichloride
6.	Acetone thiosemicarbazide	46.	Arsine
7.	Acetonitrile	47.	Asphalt
8.	Acetylene	48.	Azinpho-ethyl
9.	Acetylene tetra chloride	49.	Azinphos methyl
10.	Acrolein	50.	Bacitracin
11.	Acrylamide	51.	Barium azide
12.	Acrylonitrile	52.	Barium nitrate
13.	Adiponitrile	53.	Barium nitride
14.	Aldicarb	54.	Benzal chloride
15.	Aldrin	55.	Benzenamine,3-Trifluoromethyl
16.	Allyl alcohol	56.	Benzene
17.	Allyl amine	57.	Benzene sulfonyl chloride
18.	Allyl chloride	58.	Benzene. 1- (chloromethyl)-4 Nitro
19.	Aluminium (powder)	59.	Benzene arsenic acid
20.	Aluminium azide	60.	Benzidine
21.	Aluminium borohydride	61.	Benzidine salts
22.	Aluminium chloride	62.	Benzimidazole. 4, 5-Dichloro-2 (Trifluoromethyl)
23.	Aluminium fluoride	63.	Benzoquinone-P
24.	Aluminium phosphide	64.	Benzotrichloride
25.	Amino diphenyl	65.	Benzoyl chloride
26.	Amino pyridine	66.	Benzoyl peroxide
27.	Aminophenol-2	67.	Benzyl chloride
28.	Aminopterin	68.	Beryllium (Powder)
29.	Amiton	69.	Bicyclo (2, 2, 1) Heptane -2- carbonitrile
30.	Amiton dialate	70.	Biphenyl
31.	Ammonia	71.	Bis (2-Chloroethyl) sulphide
32.	Ammonium chloro platinate	72.	Bis (Chloromethyl) Ketone
33.	Ammonium nitrate	73.	Bis (Tert-butyl peroxy) cyclohexane
34.	Ammonium nitrite	74.	Bis (Terbutylperoxy) butane
35.	Ammonium picrate	75.	Bis(2,4, 6-Trinitrophenylamine)
36.	Anabasine	76.	Bis (Chloromethyl) Ether
37.	Aniline	77.	Bismuth and compounds
38.	Aniline 2,4, 6-Trimethyl	78.	Bisphenol-A
39.	Anthraquinone	79.	Bitoscanate
40.	Antimony pentafluoride		

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|------|--|------|------------------------------------|
| 80.  | Boron Powder                                     | 124. | Chloroacetal chloride              |
| 81.  | Boron trichloride                                | 125. | Chloroacetaldehyde                 |
| 82.  | Boron trifluoride                                | 126. | Chloroaniline -2                   |
| 83.  | Boron trifluoride comp.<br>With methylether, 1:1 | 127. | Chloroaniline -4                   |
| 84.  | Bromine  | 128. | Chlorobenzene                      |
| 85.  | Bromine pentafluoride                            | 129. | Chloroethyl chloroformate          |
| 86.  | Bromo chloro methane                             | 130. | Chloroform                         |
| 87.  | Bromodialone                                     | 131. | Chloroformyl morpholine            |
| 88.  | Butadiene  | 132. | Chloromethane                      |
| 89.  | Butane   | 133. | Chloromethyl methyl ether          |
| 90.  | Butanone-2                                       | 134. | Chloronitrobenzene                 |
| 91.  | Butyl amine tert                                 | 135. | Chlorophacinone                    |
| 92.  | Butyl glycidal ether                             | 136. | Chlorosulphonic acid               |
| 93.  | Butyl isovalarate                                | 137. | Chlorothiophos                     |
| 94.  | Butyl peroxy maleate tert                        | 138. | Chloroxuron                        |
| 95.  | Butyl vinyl ether                                | 139. | Chromic acid                       |
| 96.  | Butyl-n-mercaptan                                | 140. | Chromic chloride                   |
| 97.  | C.I.Basic green                                  | 141. | Chromium powder                    |
| 98.  | Cadmium oxide                                    | 142. | Cobalt carbonyl                    |
| 99.  | Cadmium stearate                                 | 143. | Cobalt Nitrimethylidyne compound   |
| 100. | Calcium arsenate                                 | 144. | Cobalt (Powder)                    |
| 101. | Calcium carbide                                  | 145. | Colchicine                         |
| 102. | Calcium cyanide                                  | 146. | Copper and Compounds               |
| 103. | Camphchlor (Toxaphene)                           | 147. | Copperoxychloride                  |
| 104. | Cantharidin                                      | 148. | Coumafuryl                         |
| 105. | Captan   | 149. | Coumaphos                          |
| 106. | Carbachol chloride                               | 150. | Coumatetralyl                      |
| 107. | Carbaryl   | 151. | Crimidine                          |
| 108. | Carbofuran (Furadan)                             | 152. | Crotenaldehyde                     |
| 109. | Carbon tetrachloride                             | 153. | Crotonaldehyde                     |
| 110. | Carbon disulphide                                | 154. | Cumene                             |
| 111. | Carbon monoxide                                  | 155. | Cyanogen bromide                   |
| 112. | Carbonphenothion                                 | 156. | Cyanongen iodide                   |
| 113. | Carvone  | 157. | Cyanophos                          |
| 114. | Cellulose nitrate                                | 158. | Cyanothoate                        |
| 115. | Chloroacetic acid                                | 159. | Cyanuric fluoride                  |
| 116. | Chlordane  | 160. | Cyclo hexylamine                   |
| 117. | Chlorofenvinphos                                 | 161. | Cyclohexane                        |
| 118. | Chlorinated benzene                              | 162. | Cyclohexanone                      |
| 119. | Chlorine   | 163. | Cycloheximide                      |
| 120. | Chlorine oxide                                   | 164. | Cyclopentadiene                    |
| 121. | Chlorine trifluoride                             | 165. | Cyclopentane                       |
| 122. | Chlormephos                                      | 166. | Cyclotetramethyl enetetranitramine |
| 123. | Chlormequat chloride                             | 167. | Cyclotrimethylen<br>etrinnitranine |

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|------|--|------|--|
| 168. | Cypermethrin                               | 209. | Dimethyl nitrosoamine                        |
| 169. | DDT  | 210. | Dimethyl P phenylene diamine                 |
| 170. | Decaborane (1 :4)                          | 211. | Dimethyl phosphoramidi cyanidic acid (TABUM) |
| 171. | Demeton                                    | 212. | Dimethyl phosphorochloridothioate            |
| 172. | Demeton S-Methyl                           | 213. | Dimethyl sufolane (DMS)                      |
| 173. | Di-n-propyl peroxydicarbonate (Conc = 80%) | 214. | Dimethyl sulphide                            |
| 174. | Dialifos                                   | 215. | Dimethylamine                                |
| 175. | Diazodinitrophenol                         | 216. | Dimethylaniline                              |
| 176. | Dibenzyl peroxydicarbonate (Conc>= 90%)    | 217. | Dimethylcarbonyl chloride                    |
| 177. | Diborane                                   | 218. | Dimetilan                                    |
| 178. | Dichloroacetylene                          | 219. | Dinitro O-cresol                             |
| 179. | Dichlorobenzalkonium chloride              | 220. | Dinitrophenol                                |
| 180. | Dichloroethyl ether                        | 221. | Dinitrotoluene                               |
| 181. | Dichloromethyl phenylsilane                | 222. | Dinoseb                                      |
| 182. | Dichlorophenol – 2, 6                      | 223. | Diniterb                                     |
| 183. | Dichlorophenol – 2, 4                      | 224. | Dioxane-p                                    |
| 184. | Dichlorophenoxy acetic acid                | 225. | Dioxathion                                   |
| 185. | Dichloropropane – 2, 2                     | 226. | Dioxine N                                    |
| 186. | Dichlorosalicylic acid-3, 5                | 227. | Diphacinone                                  |
| 187. | Dichlorvos (DDVP)                          | 228. | Diphosphoramide octamethyl                   |
| 188. | Dicrotophos                                | 229. | Diphenyl methane di-isocynate (MDI)          |
| 189. | Dieldrin                                   | 230. | Dipropylene Glycol Butyl ether               |
| 190. | Diepoxy butane                             | 231. | Dipropylene glycolmethyl ether               |
| 191. | Diethyl carbamazine citrate                | 232. | Disec-butyl peroxydicarbonate (Conc.>80%)    |
| 192. | Diethyl chlorophosphate                    | 233. | Disufoton                                    |
| 193. | Diethyl ethtanolamine                      | 234. | Dithiazamine iodide                          |
| 194. | Diethyl peroxydicarbonate (Conc=30%)       | 235. | Dithiobiurate                                |
| 195. | Diethyl phenylene diamine                  | 236. | Endosulfan                                   |
| 196. | Diethylamine                               | 237. | Endothion                                    |
| 197. | Diethylene glycol                          | 238. | Endrin                                       |
| 198. | Diethylene glycol dinitrate                | 239. | Epichlorohydrine                             |
| 199. | Diethylene triamine                        | 240. | EPN  |
| 200. | Diethleneglycol butyl ether                | 241. | Ergocalciferol                               |
| 201. | Diglycidyl ether                           | 242. | Ergotamine tartarate                         |
| 202. | Digitoxin                                  | 243. | Ethanesulfenyl chloride, 2 chloro            |
| 203. | Dihydroperoxypropane (Conc >=30%)          | 244. | Ethanol 1-2 dichloracetate                   |
| 204. | Diisobutyl peroxide                        | 245. | Ethion                                       |
| 205. | Dimefox                                    | 246. | Ethoprophos                                  |
| 206. | Dimethoate                                 | 247. | Ethyl acetate                                |
| 207. | Dimethyl dichlorosilane                    | 248. | Ethyl alcohol                                |
| 208. | Dimethyl hydrazine                         | 249. | Ethyl benzene                                |
|      |  | 250. | Ethyl bis amine                              |

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| 251. Ethyl bromide                                | 292. Furan                                       |
| 252. Ethyl carbamate                              | 293. Gallium Trichloride                         |
| 253. Ethyl ether                                  | 294. Glyconitrile (Hydroxyacetonitrile)          |
| 254. Ethyl hexanol -2                             | 295. Guanyl-4-nitrosaminogynyl-1-tetrazene       |
| 255. Ethyl mercaptan                              | 296. Heptachlor                                  |
| 256. Ethyl mercuric phosphate                     | 297. Hexamethyl terta-oxyacyclononate (Conc 75%) |
| 257. Ethyl methacrylate                           | 298. Hexachlorobenzene                           |
| 258. Ethyl nitrate                                | 299. Hexachlorocyclohexan (Lindane)              |
| 259. Ethyl thiocyanate                            | 300. Hexachlorocyclopentadiene                   |
| 260. Ethylamine                                   | 301. Hexachlorodibenzo-p-dioxin                  |
| 261. Ethylene                                     | 302. Hexachloronaphthalene                       |
| 262. Ethylene chlorohydrine                       | 303. Hexafluoropropanone sesquihydrate           |
| 263. Ethylene dibromide                           | 304. Hexamethyl phosphoromide                    |
| 264. Ethylene diamine                             | 305. Hexamethylene diamine N N dibutyl           |
| 265. Ethylene diamine hydrochloride               | 306. Hexane                                      |
| 266. Ethylene flourohydrine                       | 307. Hexanitrostilbene 2, 2, 4, 4, 6, 6          |
| 267. Ethylene glycol                              | 308. Hexene                                      |
| 268. Ethylene glycol dinitrate                    | 309. Hydrogen selenide                           |
| 269. Ethylene oxide                               | 310. Hydrogen sulphide                           |
| 270. Ethylenimine                                 | 311. Hydrazine                                   |
| 271. Ethylene di chloride                         | 312. Hydrazine nitrate                           |
| 272. Femamiphos                                   | 313. Hydrochloric acid (Gas)                     |
| 273. Femitrothion                                 | 314. Hydrogen                                    |
| 274. Fensulphothion                               | 315. Hydrogen bromide                            |
| 275. Fluemetil                                    | 316. Hydrogen cyanide                            |
| 276. Fluorine                                     | 317. Hydrogen fluoride                           |
| 277. Fluoro2-hyrdoxy butyric acid amid salt ester | 318. Hydrogen peroxide                           |
| 278. Fluoroacetamide                              | 319. Hydroquinone                                |
| 279. Fluoroacetic acid amide salts and esters     | 320. Indene                                      |
| 280. Fluoroacetylchloride                         | 321. Indium powder                               |
| 281. Fluorobutyric acid amide salt esters         | 322. Indomethacin                                |
| 282. Fluorocrotonic acid amides salts esters      | 323. Iodine                                      |
| 283. Fluorouracil                                 | 324. Iridium tetrachloride                       |
| 284. Fonofos                                      | 325. Ironpentacarbonyl                           |
| 285. Formaldehyde                                 | 326. Iso benzan                                  |
| 286. Formetanate hydrochloride                    | 327. Isoamyl alcohol                             |
| 287. Formic acid                                  | 328. Isobutyl alcohol                            |
| 288. Formoparanate                                | 329. Isobutyro nitrile                           |
| 289. Formothion                                   | 330. Isocyanic acid 3, 4-dichlorophenyl ester    |
| 290. Fosthiotan                                   | 331. Isodrin                                     |
| 291. Fuberidazole                                 |  |

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| 332. | Isofluorophosphate                            | 373. | Methoxy ethanol (2-methyl cellosolve)   |
| 333. | Isophorone diisocyanate                       | 374. | Methoxyethyl mercuric acetate           |
| 334. | Isopropyl alcohol                             | 375. | Methacryloyl chloride                   |
| 335. | Isopropyl chlorocarbonate                     | 376. | Methyl 2-chloroacrylate                 |
| 336. | Isopropyl formate                             | 377. | Methyl alcohol                          |
| 337. | Isopropyl methyl pyrazolyl dimethyl carbamate | 378. | Methyl amine                            |
| 338. | Juglone (5-Hydroxy Naphthalene-1,4 dione)     | 379. | Methyl bromide (Bromomethane)           |
| 339. | Ketene  | 380. | Methyl chloride                         |
| 340. | Lactonitrile                                  | 381. | Methyl chloroform                       |
| 341. | Lead arsenite                                 | 382. | Methyl chloroformate                    |
| 342. | Lead at high temp (molten)                    | 383. | Methyl cyclohexene                      |
| 343. | Lead azide                                    | 384. | Methyl disulphide                       |
| 344. | Lead styphanate                               | 385. | Methyl ethyl ketone peroxide (Conc.60%) |
| 345. | Leptophos                                     | 386. | Methyl formate                          |
| 346. | Lenisite                                      | 387. | Methyl hydrazine                        |
| 347. | Liquified petroleum gas                       | 388. | Methyl isobutyl ketone                  |
| 348. | Lithium hydride                               | 389. | Methyl isocyanate                       |
| 349. | N-Dinitrobenzene                              | 390. | Methyl isothiocyanate                   |
| 350. | Magnesium powder or ribbon                    | 391. | Methyl mercuric dicyanamide             |
| 351. | Malathion                                     | 392. | Methyl Mercaptan                        |
| 352. | Maleic anhydride                              | 393. | Methyl Methacrylate                     |
| 353. | Malononitrile                                 | 394. | Methyl phencapton                       |
| 354. | Manganese Tricarbonyl cyclopentadiene         | 395. | Methyl phosphonic dichloride            |
| 355. | Mechlor ethamine                              | 396. | Methyl thiocyanate                      |
| 356. | Mephospholan                                  | 397. | Methyl trichlorosilane                  |
| 357. | Mercuric chloride                             | 398. | Methyl vinyl ketone                     |
| 358. | Mercuric oxide                                | 399. | Methylene bis (2-chloroaniline)         |
| 359. | Mercury acetate                               | 400. | Methylene chloride                      |
| 360. | Mercury fulminate                             | 401. | Methylenebis-4,4(2-chloroaniline)       |
| 361. | Mercury methyl chloride                       | 402. | Metolcarb                               |
| 362. | Mesitylene                                    | 403. | Mevinphos                               |
| 363. | Methacrolein diacetate                        | 404. | Mezcarbarte                             |
| 364. | Methacrylic anhydride                         | 405. | Mitomycin C                             |
| 365. | Methacrylonitrile                             | 406. | Molybdenum powder                       |
| 366. | Methacryloyl oxyethyl isocyanate              | 407. | Monocrotophos                           |
| 367. | Methanidophos                                 | 408. | Morpholine                              |
| 368. | Methane                                       | 409. | Muscinol                                |
| 369. | Methanesulphonyl fluoride                     | 410. | Mustard gas                             |
| 370. | Methidathion                                  | 411. | N-Butyl acetate                         |
| 371. | Methiocarb                                    | 412. | N.-Butyl alcohol                        |
| 372. | Methonyl                                      | 413. | N-Hexane                                |
|      |   | 414. | N- Methyl-N, 2, 4, 6-Tetranitroaniline  |

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| 415. Naphtha   | 454. Oxamyl  |
| 416. Nephtha solvent                                       | 455. Oxetane, 3, 3-bis(chloromethyl)                     |
| 417. Naphthalene   | 456. Oxidiphenoxarsine                                   |
| 418. Naphthyl amine  | 457. Oxy disulfoton                                      |
| 419. Nickel carbonyl/nickel<br>tetracarbonyl               | 458. Oxygen (liquid)                                     |
| 420. Nickel powder   | 459. Oxygen difluoride                                   |
| 421. Nicotine  | 460. Ozone   |
| 422. Nicotine sulphate                                     | 461. P-nitrophenol                                       |
| 423. Nitric acid   | 462. Paraffin  |
| 424. Nitric oxide  | 463. Paraoxon (Diethyl 4 Nitrophenyl<br>phosphate)       |
| 425. Nitrobenzene  | 464. Paraquat  |
| 426. Nitrocellulose (dry)                                  | 465. Paraquat methosulphate                              |
| 427. Nitrochlorobenzene                                    | 466. Parathion   |
| 428. Nitrocyclohexane                                      | 467. Parathion methyl                                    |
| 429. Nitrogen  | 468. Paris green   |
| 430. Nitrogen dioxide                                      | 469. Penta borane  |
| 431. Nitrogen oxide  | 470. Penta chloro ethane                                 |
| 432. Nitrogen trifluouide                                  | 471. Penta chlorophenol                                  |
| 433. Nitroglycerine  | 472. Pentabromophenol                                    |
| 434. Nitropropane-1  | 473. Pentachloro naphthalene                             |
| 435. Nitropropane-2  | 474. Pentadecyl-amine                                    |
| 436. Nitroso dimethyl amine                                | 475. Pentaerythaiotol tetranitrate                       |
| 437. Nonane  | 476. Pentane   |
| 438. Norbormide  | 477. Pentanone   |
| 439. O-Cresol  | 478. Perchloric acid                                     |
| 440. O-Nitro Toluene                                       | 479. Perchloroethylene                                   |
| 441. O-Toludine  | 480. Peroxyacetic acid                                   |
| 442. O-Xylene  | 481. Phenol  |
| 443. O/P Nitroaniline                                      | 482. Phenol, 2, 2-thiobis (4, 6-Dichloro)                |
| 444. Oleum   | 483. Phenol, 2, 2-thiobis (4 chloro 6-<br>methyl phenol) |
| 445. OO Diethyl S ethyl suph. methyl<br>phos               | 484. Phenol, 3-(1-methyl ethyl)<br>methylcarbamate       |
| 446. OO Diethyl S propythio methyl<br>phosdithioate        | 485. Phenyl hydrazine hydrochloride                      |
| 447. OO Diethyl s ethylsulphinyl<br>methylphosphorothioate | 486. Phenyl mercury acetate                              |
| 448. OO Diethyl s ethylsulphonyl<br>methylphosphorothioate | 487. Phenyl silatrane                                    |
| 449. OO Diethyls<br>ethylthiomethylphospho-rothioate       | 488. Phenyl thiourea                                     |
| 450. Organo rhodium complex                                | 489. Phenylene P-diamine                                 |
| 451. Orotic acid   | 490. Phorate   |
| 452. Osmium tetroxide                                      | 491. Phosazetin  |
| 453. Oxabain   | 492. Phosfolan   |
|  | 493. Phosgene  |
|  | 494. Phosmet   |
|  | 495. Phosphamidon  |

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|------|--|------|--------------------------------------|
| 496. | Phosphine                                      | 535. | Propionitrile                        |
| 497. | Phosphoric acid                                | 536. | Propionitrile, 3-chloro              |
| 498. | Phosphoric acid dimethyl (4-methyl thio)phenyl | 537. | Propiophenone, 4-amino               |
| 499. | Phosphorothioic acid dimethyl S(2-Bis) Ester   | 538. | Propyl chloroformate                 |
| 500. | Phosphorothioic acid methyl (ester)            | 539. | Propylene dichloride                 |
| 501. | Phosphorothioic acid, OO Dimethyl S-(2-methyl) | 540. | Propylene glycol, allylether         |
| 502. | Phosphorothioic, methyl-ethyl ester            | 541. | Propylene imine                      |
| 503. | Phosphorous                                    | 542. | Propylene oxide                      |
| 504. | Phosphorous oxychloride                        | 543. | Prothoate                            |
| 505. | Phosphorous pentaoxide                         | 544. | Pseudosumene                         |
| 506. | Phosphorous trichloride                        | 545. | Pyrazoxon                            |
| 507. | Phosphorous penta chloride                     | 546. | Pyrene                               |
| 508. | Phthalic anhydride                             | 547. | Pyridine                             |
| 509. | Phylloquinone                                  | 548. | Pyridine, 2-methyl-3-vinyl           |
| 510. | Physostigmine                                  | 549. | Pyridine, 4-nitro-1-oxide            |
| 511. | Physostigmine salicylate (1:1)                 | 550. | Pyridine, 4-nitro-1-oxide            |
| 512. | Picric acid (2, 4, 6- trinitrophenol)          | 551. | Pyriminil                            |
| 513. | Picrotoxin                                     | 552. | Quinaliphos                          |
| 514. | Piperdine                                      | 553. | Quinone                              |
| 515. | Piprotal                                       | 554. | Rhodium trichloride                  |
| 516. | Pirinifos-ethyl                                | 555. | Salcomine                            |
| 517. | Platinous chloride                             | 556. | Sarin                                |
| 518. | Platinum tetrachloride                         | 557. | Selenious acid                       |
| 519. | Potassium arsenite                             | 558. | Selenium Hexafluoride                |
| 520. | Potassium chlorate                             | 559. | Selenium oxychloride                 |
| 521. | Potassium cyanide                              | 560. | Semicarbazide hydrochloride          |
| 522. | Potassium hydroxide                            | 561. | Silane (4-amino butyl) diethoxy-meth |
| 523. | Potassium nitride                              | 562. | Sodium                               |
| 524. | Potiassium nitrite                             | 563. | Sodium anthra-quinone-1-sulphonate   |
| 525. | Potassium peroxide                             | 564. | Sodium arsenate                      |
| 526. | Potassium silver cyanide                       | 565. | Sodium arsenite                      |
| 527. | Powdered metals and mixtures                   | 566. | Sodium azide                         |
| 528. | Promecarb                                      | 567. | Sodium cacodylate                    |
| 529. | Promurit                                       | 568. | Sodium chlorate                      |
| 530. | Propanesultone                                 | 569. | Sodium cyanide                       |
| 531. | Propargyl alcohol                              | 570. | Sodium fluoro-acetate                |
| 532. | Propargyl bromide                              | 571. | Sodium hydroxide                     |
| 533. | Propen-2-chloro-1 ,3-diou diacetate            | 572. | Sodium pentachloro-phenate           |
| 534. | Propiolactone beta                             | 573. | Sodium picramate                     |
|      |  | 574. | Sodium selenate                      |
|      |  | 575. | Sodium selenite                      |
|      |  | 576. | Sodium sulphide                      |
|      |  | 577. | Sodium tellorite                     |

578. Stannane acetoxy triphenyl  
579. Stibine (Antimony hydride)  
580. Strychnine  
581. Strychnine sulphate  
582. Styphinic acid (2, 4,6-trinitroresorcinol)  
583. Styrene  
584. Sulphotec  
585. Sulphoxide, 3-chloropropyl octyl  
586. Sulphur dichloride  
587. Sulphur dioxide  
588. Sulphur monochloride  
589. Sulphur tetrafluoride  
590. Sulphur trioxide  
591. Sulphuric acid  
592. Tellurim (powder)  
593. Tellurium hexafluoride  
594. TEPP (Tetraethyl pyrophosphate)  
595. Terbufos  
596. Tert-Butyl alcohol  
597. Tert-Butyl peroxy carbonate  
598. Tert-Butyl peroxy isopropyl  
599. Tert-Butyl peroxyacetate (Conc  $\geq 70\%$ )  
600. Tert-Butyl peroxy pivalate (Conc  $\geq 77\%$ )  
601. Tert-Butyl peroxy iso-butylate  
602. Tetra hydrofuran  
603. Terta methyl lead  
604. Tetra nitromethane  
605. Tetra-chlorodibenzo-p-dioxin, 1, 2, 3, 7, 8(TCDD)  
606. Tetraethyl lead  
607. Tetrafluoroethylene  
608. Tetramethylene disulphotetramine  
609. Thallic oxide  
610. Thallium carbonate  
611. Thallium sulphate  
612. Thallous chloride  
613. Thallous malonate  
614. Thallous sulphate  
615. Thiocarbazine  
616. Thiocyanic acid, 2(Benzothiazolyethio) methyl  
617. Thiofamox  
618. Thiometon  
619. Thionazin  
620. Thionyl chloride  
621. Thiophenol  
622. Thiosemicarbazide  
623. Thiourea (2 chloro-phenyl)  
624. Thiourea (2-methyl phenyl)  
625. Tirpate (2,4-dimethyl-1,3-dithiolane)  
626. Titanium powder  
627. Titanium tetra-chloride  
628. Toluene  
629. Toluene -2,4-di-isocyanate  
630. Toluene 2,6-di-isocyanate  
631. Trans-1,4-di chloro-butene  
632. Tri nitro anisole  
633. Tri (Cyclohexyl) methylstannyl 1,2,4 triazole  
634. Tri (Cyclohexyl) stannyl-1H-1, 2, 3-triazole  
635. Triaminotrinitrobenzene  
636. Triamphos  
637. Triazophos  
638. Tribromophenol 2, 4, 6  
639. Trichloro naphthalene  
640. Trichloro chloromethyl silane  
641. Trichloroacetyl chloride  
642. Trichlorodichlorophenylsilane  
643. Trichloroethyl silane  
644. Trichloroethylene  
645. Trichloromethane sulphenyl chloride  
646. Trichloronate  
647. Trichlorophenol 2, 3, 6  
648. Trichlorophenol 2, 4, 5  
649. Trichlorophenyl silane  
650. Trichlorophon  
651. Triethoxy silane  
652. Triethylamine  
653. Triethylene melamine  
654. Trimethyl chlorosilane  
655. Trimethyl propane phosphite  
656. Trimethyl tin chloride  
657. Trinitro aniline  
658. Trinitro benzene

- |      |                             |      |                           |
|------|-----------------------------|------|---------------------------|
| 659. | Trinitro benzoic acid       | 673. | Vinyl cyclohexane dioxide |
| 660. | Trinitro phenetole          | 674. | Vinyl fluoride            |
| 661. | Trinitro-m-cresol           | 675. | Vinyl norbornene          |
| 662. | Trinitrotoluene             | 676. | Vinyl toluene             |
| 663. | Tri-ortho creosyl phosphate | 677. | Vinylidene chloride       |
| 664. | Triphenyl tin chloride      | 678. | Warfarin                  |
| 665. | Tris(2-chloroethyl)amine    | 679. | Warfarin Sodium           |
| 666. | Turpentine                  | 680. | Xylene dichloride         |
| 667. | Uranium and its compounds   | 681. | Xylidine                  |
| 668. | Valino mycin                | 682. | Zinc dichloropentanitrile |
| 669. | Vanadium pentaoxide         | 683. | Zinc phosphide            |
| 670. | Vinyl acetate monomer       | 684. | Zirconium & compounds     |
| 671. | Vinyl bromide               |      |                           |
| 672. | Vinyl chloride              |      |                           |

**SCHEDULE 2**

[See rule 2(e)(ii),4(1)(b), 4(2) (1) and 6 (1) (b)]

**ISOLATED STORAGE AT INSTALLATIONS OTHER THAN  
THOSE COVERED BY SCHEDULE 4**

(a) The threshold quantities set out below relate to each installation or group of installation belonging to the same occupier where the distance between installation is not sufficient to avoid, in foreseeable circumstances, any aggravation of major accident hazards. These threshold quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.

(b) For the purpose of determining the threshold quantity of a hazardous chemical at an isolated storage, account shall also be taken of any hazardous chemical which is :-

- (i) in that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it;
- (ii) at any other site under the control of the same occupier any part of the boundary of which is within 500 meters of the said site; and
- (iii) in any vehicle, vessel, aircraft or hovercraft, under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it;

but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or a hovercraft used for transporting it.

S.No	Chemicals	Threshold Quantities (tonnes)	
		<sup>1</sup> [For application of rules 4,5,7 to 9 and 13 to 15]	<sup>2</sup> [For application of rule 10 to 12]
1	2	3	4
1.	Acrylonitrile	350	5,000
2.	Ammonia	60	600
3.	Ammonium nitrate (a)	350	2,500
4.	Ammonium nitrate fertilizers (b)	1,250	10,000
5.	Chlorine	10	25
6.	Flammable gases as defined in Schedule 1, paragraph (b) (i)	50	300
<sup>3</sup> [7.	Extremely flammable liquids as defined in Schedule 1, paragraph (b) (ii)	5000	50,000]
8.	Liquid oxygen	200	2000
9.	Sodium chlorate	25	250
10.	Sulphur dioxide	20	500
11.	Sulphur trioxide	15	100
<sup>4</sup> [12.	Carbonyl chloride	0.750	0.750
13.	Hydrogen Sulphide	5	50
14.	Hydrogen Fluoride	5	50
15.	Hydrogen Cyanide	5	50
16.	Carbon disulphide	20	200
17.	Bromine	50	500
18.	Ethylene oxide	5	501
19.	Propylene oxide	5	50

<sup>1</sup> Substituted by Rule 10(i) (a) of the MSIHC (Amendment) Rules, 2000 notified by S.O.57(E), dated 19.1.2000 ;

<sup>2</sup> Substituted by Rule 10(i) (b), *ibid*;

<sup>3</sup> Substituted entry 7 by Rule 10(ii), *ibid* ;

<sup>4</sup> Inserted entries 12 to 27 by Rule 11 of the MSIHC (Amendment) Rules, 1994 notified vide S.O.2882,dated 3.10.1994.

S.No	Chemicals	Threshold Quantities (tonnes)	
		<sup>1</sup> [For application of rules 4,5,7 to 9 and 13 to 15]	<sup>2</sup> [For application of rule 10 to 12]
1	2	3	4
20.	2-Propenal (Acrolein)	20	200
21.	Bromomethane (Methyl bromide)	20	200
22.	Methyl isocyanate	0.150	0.150
23.	Tetraethyl lead or tetramethyl lead	5	50
24.	1,2 Dibromoethane (Ethylene dibromide)	5	50
25.	Hydrogen chloride (liquefied gas)	25	250
26.	Diphenyl methane di-isocyanate (MDI)	20	200
27.	Toluene di-isocyanate (TDI)	10	100]
<sup>1</sup> [28.	Very highly flammable liquids as defined in Schedule 1, paragraph (b) (iii)	7,000	7,000]
29.	Highly flammable liquids as defined in Schedule 1, paragraph (b) (iv)	10,000	10,000
30.	Flammable liquids as defined in Schedule - 1, paragraph (b) (v)	15,000	1,00,000]

- (a) This applies to ammonium nitrate and mixtures of ammonium nitrates where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight and to aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight.
- (b) This applies to straight ammonium nitrate fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound-fertilizer contains ammonium nitrate together with phosphate and/or potash).

<sup>1</sup> Inserted entries 28, 29 and 30 by 10(iii) of the HSIHC (Amendment) Rules, 2000 notified by S.O.57(E), dated 19.1.2000.

**SCHEDULE 3**

[See Rule 2(e)(iii), 5 and 6(1) (a)]

**LIST OF HAZARDOUS CHEMICALS FOR APPLICATION OF  
RULES 5 AND 7 TO 15**

- (a) The quantities set-out-below relate to each installation or group of installations belonging to the same occupier where the distance between the installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major-accident hazards. These quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.
- (b) For the purpose of determining the threshold quantity of a hazardous chemical in an industrial installation, account shall also be taken of any hazardous chemicals which is :-
- (i) in that part of any pipeline under the control of the occupier have control of the site, which is within 500 metres off that site and connected to it;
  - (ii) at any other site under the control of the same occupier any part of the boundary of which is within 500 metres of the said site ; and
  - (iii) in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it;

but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft used for transporting it.

**PART - I**  
**NAMED CHEMICALS**

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
<b>GROUP 1-TOXIC SUBSTANCES</b>				
1.	Aldicarb	100kg		116-06-3
2.	4-Aminodiphenyl	1 kg		96-67-1
3.	Amiton	1 kg		78-53-5
4.	Anabasine	100 kg		494-52-0
5.	Arsenic pentoxide, Arsenic (V) acid & salts	500 kg		
6.	Arsenic trioxide, Arsenic (III) acid & salts	100 kg		
7.	Arsine (Arsenic hydride)	10kg		7784-42-1
8.	Azinphos-ethyl	100kg		2642-71-9
9.	Azinphos-methyl	100 kg		86-50-0
10.	Benzidine	1 kg		92-87-5
11.	Bezidine salts	1 kg		
12.	Beryllium (powders, compounds)	10 kg		
13.	Bis (2-chloroethyl) sulphide	1 kg		505-60-2
14.	Bis (chloromethyl) ether	1 kg		542-88-1
15.	Carbophuran	100 kg		1563-66-2
16.	Carbophenothion	100 kg		786-19-6
17.	Chlorefenvinphos	100 kg		470-90-6
18.	4-(Chloroformyl) morpholine	1 kg		15159-40-7
19.	Chloromethyl methyl ether	1 kg		107-30-2
20.	Cobalt (metal, oxide, carbonates, sulphides, as powders)	1 t		
21.	Crimidine	100 kg		535-89-7
22.	Cynthoate	100 kg		3734-95-0
23.	Cycloheximide	100 kg		66-81-9
24.	Demeton	100 kg		8065-48-3
25.	Dialifos	100 kg		10311-84-9
26.	OO-Diethyl S-ethylsulphinylmethyl phosphorothiate	100 kg		2588-05-8
27.	OO-Diethyl S-ethylsulphonylmethyl phosphorothiate	100 kg		2588-06-9
28.	OO-Diethyl S-ethylthiomethyl Phosphorothioate	100 kg		2600-69-3

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
29.	OO-Diethyl S-isoprophylthiomethyl phosphorothiate	100 kg		78-52-4
30.	OO-Diethyl S-isopropylthiomethyl phosphorodithioate	100 kg		3309-68-0
31.	Dimefox	100 kg		115-26-4
32.	Dimethylcarbamoyl chloride	1 kg		79-44-7
33.	Dimethylnitrosamine	1 kg		62-75-9
34.	Dimethyl phosphoromidocynicidic acid	1 t		63917-41-9
35.	Diphacinone	100 kg		82-66-6
36.	Disulfoton	100 kg		298-04-4
37.	EPN	100 kg		2104-64-5
38.	Ethion	100 kg		563-12-2
39.	Fensulfothion	100 kg		115-90-2
40.	Fluenetil	100 kg		4301-50-2
41.	Fluoroacetic acid	1 kg		144-49-0
42.	Fluoroacetic acid, salts	1 kg		
43.	Fluoroacetic acid, esters	1 kg		
44.	Fluoroacetic acid, amides	1 kg		
45.	4-Fluorobutyric acid	1 kg		462-23-7
46.	4-Fluorobutyric acid, salts	1 kg		
47.	4-Fluorobutyric acid, esters	1 kg		
48.	4-Fluorobutyric acid, amides	1 kg		
49.	4-Fluorobutyric acid	1 kg		37759-72-1
50.	4-Fluorocrotonic acid, salts	1 kg		
51.	4-Fluorocrotonic acid, esters	1 kg		
52.	4-Fluorocrotonic acid, amides	1 kg		
53.	4-Fluoro-2-hydroxybutyric acid, amides	1 kg		
54.	4-Fluoro-2-hydroxybutyric acid, salts	1 kg		
55.	4-Fluoro-2-hydroxybutyric acid, esters	1 kg		
56.	4-Fluoro-2-hydroxybutyric acid, amides	1 kg		
57.	Glycolonitrile (Hydroxyacetonitrile )	100 kg		107-16-4
58.	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	100 kg		194-8-74-3
59.	Hexmathylphosphoramide	1 kg		680-31-9
60.	Hydrogen selenide	10 kg		7783-07-5
61.	Isobenzan	100 kg		297-78-9
62.	Isodrin	100 kg		465-73-6
63.	Juglone (5-Hydroxynaphthalene 1,4 dione)	100 kg		481-39-0

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
64.	4,4-Methylenebis (2-chloroniline)	10 kg		101-14-4
65.	Mthyl isocynate	150 kg	150kg	624-83-9
66.	Mevinphos	100 kg		7786-34-7
67.	2-Naphthylamine	1 kg		91-59-8
68.	2-Nickel (metal, oxides, carbonates), sulphides, as powers)	1 t		
69.	Nickel tetracarbonyl	10 kg		13463-39-3
70.	Oxygendisulfoton	100 kg		2497-07-6
71.	Oxygen difluoride	10 kg		7783-41-7
72.	Paraxon (Diethyl 4-nitrophenyl phosphate)	100 kg		311-45-5
73.	Parathion	100 kg		56-38-2
74.	Parathion-methyl	100 kg		298-00-0
75.	Pentaborane	100 kg		19624-22-7
76.	Phorate	100 kg		298-02-2
77.	Phosacetim	100 kg		4104-14-7
78.	Phosgene (carbonyl chloride)	750 kg	750kg	75-44-5
79.	Phosphamidon	100 kg		13171-21-6
80.	Phosphine (Hydrogen phosphide)	100 kg		7803-51-2
81.	Promurit (1-(3,4 dichlorophenyl)-3-triazenthio-carboxamide)	100 kg		5836-73-7
82.	1,3-Propanesultone	1 kg		1120-71-4
83.	1-Propen-2-chloro-1,3diol diacetate	10 kg		10118-72-6
84.	Pyrazoxon	100 kg		108-34-9
85.	Selenium hexafluoride	10 kg		7783-79-1
86.	Sodium selenite	100 kg		10102-18-8
87.	Stibine (Antimony hydride)	100 kg		7803-52-3
88.	Sulfotep	100 kg		3689-24-5
89.	Sulphur dichloride	1 t		10545-99-0
90.	Tellurium hexafluoride	100 kg		7783-80-4
91.	TEPP	100 kg		107-49-3
92.	2,3,7,8,-Tetrachlorodibenzo-p-dioxin (TCDD)	1 kg		1746-01-6
93.	Tetramethylenedisulphotetramine	1 kg		80-12-6
94.	Thionazin	100 kg		297-97-2
95.	Tirpate (2,4-Dimethyl-1,3-dithiolane-2-carboxaldehyde O-methylcarbamoyloxime)	100 kg		26419-73-8

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
96.	Trichloromethanesulphonyl chloride	100 kg		594-42-3
97.	1-Tri (cyclohexyl) stannyl 1H-1,2,4-Triazole	100 kg		41083-11-8
98.	Triethylenemelamine	10 kg		51-18-3
99.	Warfarin	100 kg		81-81-2
<b>GROUP -2 TOXIC SUBSTANCES</b>				
100	Acetone cyanohydrin (2-Cyanopropan-2-ol)	200 t		75-86-5
101	Acrolein (2-Propenal)	20 t	<sup>1</sup> [200t]	107-02-8
102	Acrylonitrile	20 t	200t	107-13-1
103	Allyl alcohol (Propen-1-ol)	200 t		107-18-6
104	Alylamine	200 t		107-11-9
105	Ammonia	50 t	500t	7664-41-7
106	Bromine	40 t	<sup>1</sup> [500t]	7726-95-6
107	Carbon disulphide	20 t	200t	75-15-0
108	Chlorine	10 t	25t	7782-50-5
109	Diphneyl ethane di-isocynate (MDI)	20 t	<sup>1</sup> [200t]	101-68-8
110	Ethylene dibromide (1,2-Dibromoethane)	5 t	<sup>1</sup> [50t]	106-93-4
111	Ethyleneimine	5 t		151-56-4
112	Formaldehyde (concentration <90%)	5 t	<sup>1</sup> [50t]	50-00-0
113	Hydrogen chloride (liquified gas)	25 t	250t	7647-01-0
114	Hydrogen cyanide	5 t	20t	74-90-8
115	Hydrogen fluoride	5 t	50t	7664-39-3
116	Hydrogen sulphide	5 t	50t	7783-06-4
117	Methyl bromide (Bromomethane)	20 t	<sup>1</sup> [200 t]	74-83-9
118	Nitrogen oxides	50 t		11104-93-1
119	Propyleneimine	50 t		75-55-8
120	Sulphur dioxide	20 t	250t	7446-09-5
121	Sulphur trioxide	15 t	75t	7446-11-9
122	Tetraethyl lead	5 t	<sup>2</sup> [200t]	78-00-2
123	Tetra methyl lead	5 t	<sup>1</sup> [100t]	75-74-1
124	Toluene di-isocynate (TDI)	10 t		584-84-9

<sup>1</sup> Inserted by Rule14 (a to h) of MSIHC (Amendment) Rules, 1994 notified vide notification S.O.2882, dated 3.10.1994.

<sup>2</sup> Inserted by Rule14 (a to h) of MSIHC (Amendment) Rules, 1994 notified vide notification S.O.2882, dated 3.10.1994.

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
<b>GROUP 3-HIGHLY REACTIVE SUBSTANCES</b>				
125	Acetylene (ethyne)	5 t		74-86-2
126	a. Ammonium nitrate (1) b. Ammonium nitrate in form of fertilizer (2)	350t 1250 t	2500t	6484-52-2
127	2,2 Bis (tert-butylperoxy) butane) (concentration >70%)	5 t		2167-23-9
128	1, 1-Bis(tert-butylperoxy) cyclohexane (concentration > 80%)	5 t		3006-86-8
129	tert-Butyle peroxyacetate (concentration ≤70% )	5 t		107-71-1
130	tert-Butyle peroxy isobutyrate (concentration >80%)	5 t		109-13-7
131	Tert-Butyl peroxy isopropyl carbonate (concentration ≥80%)	5 t		2372-21-6
132	Tert-Butyl peroxyacetate (concentration ≥80%)	5 t		1931-62-0
133	Tert-Butyl peroxyisovalate (concentration ≥77%)	50 t		927-07-1
134	Dibenzyl peroxydicarbonate (concentration ≥90%)	5 t		2144-45-8
135	Di-sec-butyl peroxydicarbonate (concentration ≥80%)	5 t		19910-65-7
136	Diethyl peroxydicarbonate (concentration ≥30% )	50 t		14666-78-5
137	2,2-dihydroperoxypropane (concentration ≥30%)	5 t		2614-76-08
138	di-isobutyl peroxide (concentration ≥50%)	50 t		3437-84-1
139	Di-n-propyl peroxydicarbonate (concentration ≥80%)	5 t		16066-38-9
140	Ethylene oxide	5 t	50t	75-21-8
141	Ethyl nitrate	50 t		625-58-1
142	3,3,6,6,9,9 Hexamethyl - 1,2,4 5-tert oxacyclononane (concentration ≥75%)	50 t		22397-33-7
143	Hydrogen	2 t	50 t	1333-74-0

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
144	Liquid Oxygen	200 t	<sup>1</sup> [2000t]	7782-41-7
145	Methyl ethyl ketone peroxide (concentration ≥60%)	5 t		1338-23-4
146	Methyl isobutyl ketone peroxide (concentration ≥60%)	50 t		37206-20-5
147	Peracetic acid (concentration ≥60%)	50 t		79-21-0
148	Propylene oxide	5 t	<sup>1</sup> [50t]	75-56-9
149	Sodium chlorate	25 t		7775-09-9
<b>GROUP 4-EXPLOSIVE SUBSTANCES</b>				
150	Barium azide	<sup>1</sup> [100] kg		18810-58-7
151	Bis(2,4,6 -trinitrophenyl) amine	50 t		131-073-7
152	Chlorotrinitro benzene	50 t		28260-61-9
153	Cellulose nitrate (containing 12.6% Nitrogen)	50 t		9004-70-0
154	Cyclotetramethyleneteranitramine	50 t		2691-41-0
155	Cyclotrimethylenetiraniramine	50 t		121-82-1
156	Diazodinitrophenol	10 t		7008-81-3
157	Diethylene glycol dinitrate	10 t		693-21-0
158	Dinitrophenol, salts	50 t		
159	Enthylene glycol dinitrate	10 t		628-96-6
160	1-Gyanyl-4-nitrosaminoguanyl-1-tetrazene	<sup>1</sup> [100 kg]		109-27-3
161	2, 2, 4, 4, 6, 6, -Hexanitositibene	50 t		20062-22-0
162	Hydrazine nitrate	50 t		13464-97-6
163	Lead azide	<sup>1</sup> [100 kg]		13424-46-9
164	Lead Styphnate ( Lead 2,4,6-trinitroresorcinoxide)	50 t		15245-44-0
165	Mercury fulminate	10 t		20820-45-5 628-86-4
166	N-Methyl-N,2,4,6-tetranitroaniline	50 t		497-45-8
167	Nitroglycerine	10 t	10t	55-63-0
168	Pentacrythritol tetra nitrate	50 t		78-11-5

<sup>1</sup> Substituted by Rule 11(i) of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

S. No.	Chemicals	Threshold	Quantity	CAS Number
		for application of Rules 5, 7-9 and 13-15	for application of Rules 10-12	
(1)	(2)	(3)	(4)	(5)
169	Picric acid, (2,3,6-Trinitrophenol)	50 t		88-89-1
170	Sodium picramate	50 t		831-52-7
171	Styphnic acid (2,4,6-Trinitroresorcinol)	50 t		82-71-3
172	1,3,5-Triamino-2,4,6-Trinitrobenzene	50 t		3058-38-6
173	Trinitroaniline-	50 t		26952-42-1
174	2,4,6-Trinitroanisole	50 t		606-35-9
175	Trinitrobenze	50 t		25377-32-6
176	Trinitrobenzoic acid	50 t		35860-50-5 129-66-8
177	Trinitroresol	50 t		28905-71-7
178	2,4,6-Trinitrophenitole	50 t		4732-4-3
179	2,4,6-Trinitrotoluene	50 t	50 t	118-96-7

<sup>1</sup>[PART II

**CLASSES OF SUBSTANCES AS DEFINED IN PART – I, SCHEDULE –1  
AND NOT SPECIFICALLY NAMED IN PART –I OF THIS SCHEDULE**

1	2	3	4
<b>GROUP 5 - Flammable substances</b>			
1.	Flammable Gases	15t	200t
2.	Extremely flammable liquids	1000t	5000t
3.	Very highly flammable liquids	1500t	10000t
4.	Highly Flammable liquids which remains liquid under pressure	25t	200t
5.	Highly Flammable liquids	2500t	20000t
6.	Flammable liquids	5000t	50000t]

- (1) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight and aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90% by weight.
- (2) This applied to straight ammonium nitrate fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight ( a compound fertilizer contains ammonium nitrate together with phosphate and/or potash).

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<sup>1</sup> Substituted by Rule 11(ii) of the MSIHC (Amendment) Rules, 2000 notified by S.O.57(E), dated 19.1.2000.

**SCHEDULE -4**

(See Rule 2(h) (i))

1. Installation for the production, processing or treatment of organic or inorganic chemicals using for this purpose, among others;
  - (a) alkylation
  - (b) Amination by ammonolysis
  - (c) carbonylation
  - (d) condensation
  - (e) dehydrogenation
  - (f) esterification
  - (g) halogenation and manufacture of halogens
  - (h) hydrogenation
  - (i) hydrolysis
  - (j) Oxidation
  - (k) Polymerization
  - (l) Sulphonation
  - (m) desulphurization, manufacture and transformation of sulphur containing compounds
  - (n) nitration and manufacture of nitrogen containing compounds
  - (o) manufacture of phosphorous-containing compounds
  - (p) formulation of pesticides and of pharmaceutical products
  - (q) distillation
  - (r) extraction
  - (s) solvation
  - (t) mixing
2. Installation for distillation, refining or other processing of petroleum or petroleum products.
3. Installations for the total or partial disposal of solid or liquid substances by incineration or chemical decomposition.
4. Installations for production, processing, <sup>1</sup>[use] or treatment of energy gases, for example, LPG, LNG, SNG.
5. Installation for the dry distillation of coal or lignite.
6. Installations for the production of metals or non-metals by a wet process or by means of electrical energy.

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<sup>1</sup> Inserted by Rule 12 of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

**SCHEDULE -5**  
**(See Rules, 2(b) and 3)**

S. No.	Authority(ies) with legal backing	Duties and corresponding Rule
(1)	(2)	(3)
1.	Ministry of Environment and Forests under Environment (Production) Act, 1986.	1. Notification of hazardous chemicals as per Rules 2(e)(i), 2(e) (ii) & 2(e) (iii)
2.	Chief Controller Imports & Exports under Import & Exports (Control) Act, 1947.	Import of hazardous chemicals as per Rule 18
3.	Central Pollution Control Board or State Pollution Control Board <sup>1</sup> [or Committee] under Environment (Protection) Act, 1986 as the case may be.	(1) Enforcement of directions and procedures in respect of isolated storage of hazardous chemicals, regarding- (i) Notification of major accidents as per Rules 5(1) and 5(2) (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports in respect of isolated storages as per Rule 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (2) Import of hazardous Chemicals and enforcement of directions and procedures on import of hazardous chemicals as per Rule 18.
4.	Chief Inspector of Factories appointed under the Factories Act, 1948.	Enforcement of directions and procedures in respect of industrial installations and isolated storages covered under the Factories Act, 1948, dealing with hazardous chemicals and pipelines including inter-state pipelines regarding- (i) Notification of major accidents as per Rule 5(1) and 5 (2). (ii) Notification of sites as per Rules, 7 to 9. (iii) Safety reports as per Rules, 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per S. No. 9 of this schedule.

<sup>1</sup> Inserted by Rule 13(i) of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

<b>S. No.</b>	<b>Authority(ies) with legal backing</b>	<b>Duties and corresponding Rule</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
5.	Chief Inspector of Dock Safety appointed under the Dock Workers (Safety, Health and Welfare) Act, 1986.	Enforcement of directions and procedures in respect of industrial installations and isolated storages dealing with hazardous chemicals and pipelines <sup>1</sup> [inside a port covered under the Dock Workers (Safety, Health and Welfare) Act, 1986] regarding- (i) Notification of major accidents as per Rules 5(1) and 5(2). (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports as per Rules 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (v) Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per S. No.9 of this Schedule.
6.	Chief Inspector of Mines appointed under the Mines Act, 1952	Enforcement of directions and procedures in respect of industrial installations and isolated storages dealing with hazardous chemicals <sup>2[***]</sup> regarding - (i) Notification of major accidents as per Rules 5(1) and 5(2). (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports as per Rules 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (v) Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per S. No.9 of this Schedule.
7.	Atomic Energy Regulatory Board appointed under the Atomic Energy Act, 1972.	<sup>3</sup> [Enforcement of directions and procedures regarding :- (a) Notification of major accidents as per rule 5(1) and 5(2) (b) Approval and Notification of Sites as per rule 7; (c) Safety report and safety audit

<sup>1</sup> Substituted by Rule 13(ii) of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000;

<sup>2</sup> Omitted by Rule 13(iii), *ibid*;

<sup>3</sup> Substituted by Rule 13(iv), *ibid*.

S. No.	Authority(ies) with legal backing	Duties and corresponding Rule
(1)	(2)	(3)
		repots as per rule 10 to 12; (d) Acceptance of On-site Emergency plans as per rule 13; (e) Assisting the District Collector in the preparation of Off-Site emergency plans as per serial number 9 of this Schedule ]
8.	Chief Controller of Explosives appointed under the Indian Explosive Act and Rules, 1983	Enforcement of directions and procedures as per the provisions of <sup>1</sup> [(i) The Explosives Act, 1884(4 of 1884) and the rules made thereunder, namely:- (a) The Gas Cylinders Rules, 1981; (b) The Static and Mobile Pressure Vessel (Unified) Rules, 1981; (c) The Explosive Rules, 1984 (ii) The petroleum Act, 1934 (30 of 1934) and the Rules made thereunder, namely; (a) The Petroleum Rules, 1976; (b) The Calcium Carbide Rules, 1987]; <sup>2</sup> [and in respect of Industrial installation and isolated storages dealing with hazardous chemicals and pipelines including inter-state pipelines regarding. : -  (a) Notification of major accident as per rule 5; (b) Approval and notification of sites as per rule 7; (c) Safety report and safety audit reports as per rules 10 to 12; (d) Acceptance of On-site Emergency plans as per rule 13; (e) Assisting the District Collector in the preparation of Off-Site emergency plans as per serial number 9 of this Schedule.]

<sup>1</sup> Substituted by Rule 15 of the MSIHC (Amendment) Rules, 1994, notified vide S.O.2882, dated 3.10.1994.

<sup>2</sup> Inserted by Rule 13 (v) of the MSIHC (Amendment) Rules, 2000 notified vide S.O.57(E), dated 19.1.2000.

<b>S. No.</b>	<b>Authority(ies) with legal backing</b>	<b>Duties and corresponding Rule</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
9.	District Collector or District Emergency Authority designated by the State Government	Preparation of off-site emergency plans as per Rule 14
<sup>1</sup> [10.	<sup>2</sup> [CENTRE FOR ENVIRONMENT AND EXPLOSIVE SAFETY (CEES), Defense Research and Development of Organisation (DRDO). Department of defence Research & Development, Ministry of Defence	Enforcement of directions and procedures in respect of laboratories, industrial establishment and isolated storages dealing with hazardous chemicals in the Ministry of Defence]

<sup>1</sup> Substituted by Rule 13(vi), of the MSIHC (Amendment) Rules, 2000 notified vide S.O.No.57(E), dated 19.1.2000.

<sup>2</sup> Inserted by G.S.R.584(E), dated 9<sup>th</sup> June, 1990.

**SCHEDULE -6**  
[See Rule 5(1)]

**INFORMATION TO BE FURNISHED REGARDING NOTIFICATION OF A  
MAJOR ACCIDENT**

Report number .....  
of the particular accident.

1. General data
- (a) Name of the site
  - (b) Name and address of the manufacturer  
(Also state telephone/telex number)
  - (c) (i) Registration number
  - (ii) Licence number  
(as may have been allotted under any status applicable to the site,  
e.g.the Factories Act)
  - (d) (i) Nature of industrial activity (Mention what is actually manufactured,  
stored etc.)
  - (ii) National Industrial Classification, 1987 at the four digit level.

2. Type of major accident

Explosion  Fire  Emission of dangerous substance

Substance(s) emitted .....

3. Description of the major accident

- (a) Date, shift and hour of the accident
- (b) Department/Section and exact place where  
the accident took place
- (c) The process/operation undertaken in the  
Department/section where the accident took place.  
(attach a flow chart if necessary)
- (d) The circumstances of the accident and  
the dangerous substance involved

4. Emergency Measures taken and measures envisaged to be taken to alleviate short term effects of the accident.

5. Causes of the major accident.

Known (to be specified)

6. Not Known

Information will be supplied as soon as possible

7. Nature and extent of damage

- (a) Within the establishment - casualties .....Killed
- .....Injured
- .....Poisoned

Persons exposed to the major accident .....

- material damaged
- danger is still present
- danger no longer exists.

- (b) Outside the establishment casualties. ....Killed
- .....Injured
- .....Poisoned

Persons exposed to the major accident.....

- material damaged
- damage to environment
- the danger is still present
- the danger no longer exists

8. Data available for assessing the effects of the accident on persons and environment.

9. Steps already taken or envisaged

- (a) to alleviate medium or long term effects of the accident
- (b) to prevent recurrence of similar major accident
- (c) Any other relevant information.

**SCHEDULE -7**  
[ See Rule 7(1)]

**INFORMATION TO BE FURNISHED FOR THE NOTIFICATION OF SITES**

**PART -I**

Particulars to be included in a notification of a site

1. The name and address of the employer making the notification.
2. The full postal address of the site where the notifiable industrial activity will be carried on.
3. The area of the site covered by the notification and of any adjacent site which is required to be taken into account by virtue of b(ii) of schedule 2 and 3.
4. The date on which it is anticipated that the notifiable industrial activity will commence, or if it has already commenced a statement to that effect.
5. The name and maximum quantity liable to be on the site of each dangerous substance for which notification is being made.
6. Organisation structure namely organisation diagram for the proposed industrial activity and set up for ensuring safety and health.
7. Information relating to the potential for major accidents, namely-
  - (a) identification of major accident hazards ;

- (b) the conditions or the events which could be significant in bringing one about;
- (c) a brief description of the measures taken.

8. Information relating to the site namely-

- (a) a map of the site and its surrounding area to a scale large enough to show any features that may be significant in the assessment of the hazard or risk associated with the site,-
  - (i) area likely to be affected by the major accident.
  - (ii) Population distribution in the vicinity.
- (b) a scale plan of the site showing the location and quantities of all significant inventories of the hazardous chemicals;
- (c) a description of the process or storage involving the hazardous chemicals and an indication of the conditions under which it is normally held;
- (d) the maximum number of persons likely to be present on site.

9. The arrangement for training of workers and equipment necessary to ensure safety of such workers.

**PART -II**

Particulars to be included regarding pipeline-

1. The names and address of the persons making the notification.
2. The full postal address of the place from which the pipeline activity is controlled, addresses of the places where the pipeline starts and finishes and a map showing the pipeline route drawn to a scale of not less than 1:400000.
3. The date on which it is anticipated that the notifiable activity will commence, or if it is already commenced a statement to that effect.
4. The total length of the pipeline, its diameter and normal operating pressure and the name and maximum quantity liable to be in the pipeline of each hazardous chemical for which notification is being made.

**SCHEDULE -8**  
**[See Rule 10(1)]**  
**INFORMATION TO BE FURNISHED IN A SAFETY REPORT**

1. The name and address of the person furnishing the information.
2. Description of the industrial activity, namely-
  - (a) site,
  - (b) construction design,
  - (c) protection zones explosion protection, separation distances,
  - (d) accessibility of plant,
  - (e) maximum number of persons working on the site and particularly of those persons exposed to be hazard.
3. Description of the processes, namely -
  - (a) technical purpose of the industrial activity,
  - (b) basic principles of the technological process,
  - (c) process and safety -related data for the individual process stages,
  - (d) process description,
  - (e) Safety-related types of utilities.
4. Description of the hazardous chemicals, namely -
  - (a) chemicals (quantities, substance data, safety-related data, toxicological data and threshold values),
  - (b) the form in which the chemical may occur on or into which they may be transformed in the event of abnormal conditions,
  - (c) the degree of purity of the hazardous chemical.

5. Information on the preliminary hazard analysis, namely-
  - (a) types of accident
  - (b) system elements or events that can lead to a major accident,
  - (c) hazards,
  - (d) safety-relevant components.
  
6. Description of safety -relevant units, among others;
  - (a) special design criteria,
  - (b) controls and alarms,
  - (c) special relief systems,
  - (d) quick-acting valves,
  - (e) collecting tanks/dump tank,
  - (f) sprinkler system,
  - (g) fire fighting etc.
  
7. Information on the hazards assessment, namely-
  - (a) identification of hazards ,
  - (b) the cause of major accidents,
  - (c) assessment of hazards according to their occurrence frequency,
  - (d) assessment of accident consequences,
  - (e) safety systems,
  - (f) known accident history.
  
8. Description of information or organizational systems used to carry on the industrial activity safety, namely-
  - (a) maintenance and inspection schedules,
  - (b) guidelines for the training of personnel,
  - (c) allocation and delegation of responsibility for plant safety,
  - (d) implementation of safety procedure.
  
9. Information on assessment of the consequences of major accidents, namely-

- (a) assessment of the possible release of hazardous chemicals or of energy,
  - (b) possible dispersion of released chemical,
  - (c) assessment of the effects of the releases (size of the affected area, health effects, property damage)
10. Information on the mitigation of major accidents, namely -
- (a) fire brigade,
  - (b) alarm systems,
  - (c) emergency plan containing system of organisation used to fight the emergency, the alarm and the communication rules guidelines for fighting the emergency, information about hazardous chemicals, examples of possible accident sequences,
  - (d) coordination with the District Emergency authority and its off-site emergency plan,
  - (e) notification of the nature and scope of the hazard in the event of an accident,
  - (f) antidotes in the event of a release of a hazardous chemical.

**SCHEDULE -9**

(See Rule 17)

**SAFETY DATA SHEET****1. CHEMICAL IDENTITY**

Chemical Name		Chemical Classification	
Synonyms		Trade Name	
Formula	C.A.S.No	U.N. No.:	
Regulated Identification	Shipping Name Codes/Lable	Hazchem No.:	
		Hazardous Waste I.D. No.:	
Hazardous Ingredients	C.A.S. No.	Hazardous Ingredients	C.A.S No.:
1.		3.	
2.		4.	

**2. PHYSICAL AND CHEMICAL DATA**

Boiling Range/Point °C	Physical State	Appearance
Melting/Freezing Point °C	Vapour Pressure @ 35 °C mm/Hg	Odour
Vapour Density (Air=1)	Solubility in Water at 30°C Others	
Specific Gravity Water =1	pH	

**3. FIRE AND EXPLOSION HAZARD DATA**

Flammability	Yes/No	LEL	%	Flash Point °C	Auto ignition Temperature °C
TDG Flammability		UEL	%	Flash Point °C	
Explosion Sensitivity to Impact				Explosion Sensitivity to Static Electricity	Hazardous Combustion Products
Hazardous Polymerisation Combustible Liquid		Explosive Material		Corrosive Material	
Flammable Material		Oxidiser		Others	
Pyrophoric Material		Organic Peroxide			

**4. REACTIVITY DATA**Chemical  
StabilityIncompatibility  
With other Material

Reactivity

Hazardous Reaction  
Products**5. HEALTH HAZARD DATA**Routes of  
EntryEffects of  
Exposure/SymptomsEmergency  
TreatmentTLV(ACGIH)      ppm    mg/m<sup>3</sup>    STEL                      ppm    mg/m<sup>3</sup>

Permissible Exposure Limits LD <sub>50</sub>	ppm	mg/m <sup>3</sup>	Odour threshold LD <sub>50</sub>	ppm	mg/m <sup>3</sup>
NEPA Hazard Signals	Health		Flammability	Stability	Special

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## 6. PREVENTIVE MEASURES

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Personnel  
Protective  
Equipment

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Handling and  
Storage  
Precautions

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## 7. EMERGENCY AND FIRST AID MEASURE

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Fire Extinguishing  
Media  
FIRE

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Special Procedures

---

Unusual Hazards  
EXPOSURE

---

First Aid Measures

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Antidotes/Dosages  
SPILLS

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Steps to be taken

---

Waste Disposal Method

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## 8. ADDITIONAL INFORMATION / REFERENCES

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**9. MANUFACTURER / SUPPLIER DATA**


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Name of Firm	Contact Person in Emergency
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Mailing Address	Local Bodies Involved
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Telephone/Telex Nos.	Standard Packing
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Telegraphic Address	Tremcard Details/Ref Other.
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**10. DISCLAIMER**

Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is upto the manufacturer/seller to ensure that the information contained in the material safety data sheet is relevant to the product manufactured/handled or sold by him as the case may be. The Government makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

**SCHEDULE -10**

[See Rule 18(5)]

**FORMAT FOR MAINTAINING RECORDS OF HAZARDOUS CHEMICALS IMPORTED**

1. Name and address of the Importer:
2. Date and reference number of issuance of permission to import hazardous chemicals:
3. Description of hazardous chemicals:
  - (a) Physical form:
  - (b) Chemical form:
  - (c) Total volume and weight (in kilogram's/  
Tones)
4. Description of purpose of Import:
5. Description of storage of hazardous chemicals:
  - (a) Date:
  - (b) Method of storage

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**Note:** Published in the Gazette No.787, dt.27.11.1989.

All correction made in the terms of corrigendum No.S.O.115(E), dt.5.2.1990 published in the Gazette No. 59 dt.5.2.1990.

<sup>1</sup>[SCHEDULE –11]

[See Rule 13(1)]

**DETAILS TO BE FURNISHED IN THE ON-SITE EMERGENCY PLAN**

1. Name and address of the person furnishing the information.
2. Key personnel of the organization and responsibilities assigned to them in case of an emergency
3. Outside organization if involved in assisting during on-site emergency:
  - (a) Type of accidents
  - (b) Responsibility assigned
4. Details of liaison arrangement between the organizations.
5. Information on the preliminary hazard analysis:
  - (a) Type of accidents
  - (b) System elements or events that can lead to a major accident
  - (c) Hazards
  - (d) Safety relevant components

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<sup>1</sup> Inserted by Rule 16 of the MSIHC (Amendment) Rules, 1994 notified by S.O.2882, dated 3.10.1994.

6. Details about the site:
  - (a) Location of dangerous substances
  - (b) Seat of key personnel
  - (c) Emergency control room
  
7. Description of hazardous chemicals at plant site:
  - (a) Chemicals (Quantities and toxicological data)
  - (b) Transformation if any, which could occur.
  - (c) Purity of hazardous chemicals.
  
8. Likely dangers to the plant.
  
9. Enumerate effects of:
  - (i) Stress and strain caused during normal operation:
  - (ii) Fire and explosion inside the plant and effect if any, of fire and explosion outside.
  
10. Details regarding:
  - (i) Warning, alarm and safety and security systems.

- (ii) alarm and hazard control plans in line with disaster control and hazard control planning, ensuring the necessary technical and organizational precautions;
  - (iii) Reliable measuring instruments, control units and servicing of such equipments.
  - (iv) Precautions in designing of the foundation and load bearing parts of the building.
  - (v) Continuous surveillance of operations.
  - (vi) maintenance and repair work according to the generally recognized rules of good engineering practices.
11. Details of communication facilities available during emergency and those required for an off-site emergency.

12. Details of fire fighting and other facilities available and those required for an off-site emergency.
13. Details of first aid and hospital services available and its adequacy.

<sup>1</sup>[**SCHEDULE 12**  
[See Rule 14(1)]]

**DETAILS TO BE FURNISHED IN THE OFF-SITE EMERGENCY PLAN**

1. The types of accidents and release to be taken into account.
2. Organisations involved including key personnel and responsibilities and liaison arrangements between them.
3. Information about the site including likely locations of dangerous substances, personnel and emergency control rooms.
4. Technical information such as chemical and physical characteristics and dangers of the substances and plant.
5. Identify the facilities and transport routes.
6. Contact for further advice e.g. meteorological information, transport, temporary food and accommodation, first aid and hospital services, water and agricultural authorities.
7. Communication links including telephones, radios and standby methods.

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<sup>1</sup> Inserted by Rule 16 of the MSIHC (Amendment) Rules, 1994 notified by S.O.2882, dated 3.10.1994.

8. Special equipment including fire fighting materials, damage control and repair items.
9. Details of emergency response procedures.
10. Notify the public.
11. Evacuation arrangements.
12. Arrangements for dealing with the press and other media interests.
13. Longer term clean up.]

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**Note:** Principal rules were published in Gazette of India vide Notification S.O. 966(E), dated 27.11.1989. Amending rules were published vide GSR No.681, dated 9.6.1990, S.O.115 (E), dated 5.2.1990, S.O.2882, dated 3.10.1994 and S.O.57 (E), dated 19.1.2000.

B-29014/IPC-I/ MSIHC/2020

May 08,2020

To

**The Chairman**

All State Pollution Control Board /Pollution Control Committee

(As per enclosed list)

**Sub: Strict safety precautions to be taken before resuming operation of units – Reg.**

Sir,

Some serious cases of chemical leakages, industrial mishaps have been reported recently. In view of this, all State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) should ensure immediate compliance of the following:

- 1) A proper safety and hazard audit should be undertaken by all units before resuming operation. The SPCB/PCCs shall direct all the units that manufacture, store or import hazardous chemicals to resume their operations after COVID 19 lockdown, only after they have taken adequate and necessary steps to prevent the occurrence of any chemical leakage / accident.
- 2) The SPCBs/PCCs shall ensure that pollution control equipment, connectivity of OCEMS with CPCB/SPCB servers, effluent treatment plants including safety equipment and it machineries shall be kept in good operable conditions before resuming operation in present COVID-19 situation.
- 3) The SPCBs/PCCs shall ensure that all the units shall take utmost care in handling hazardous chemical by using trained manpower.
- 4) The SPCBs/PCCs shall closely monitor the situation and ensure that the environmental norms are not violated by any unit.
- 5) The SPCBs/PCCs will direct all such units to ensure safety of workers and residents in vicinity.
- 6) The SPCBs/PCCs shall ensure that any unit involved in the Manufacture, Storage and Import of Hazardous Chemicals shall comply with the stipulated provisions of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 and The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 without fail.

Yours faithfully

(Ravi S Prasad)  
Chairman, CPCB

dc

**ADDRESS LIST OF SPCBs/PCCs**

S.N.	Address
1.	Andhra Pradesh State Pollution Control Board D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalmvari Street, Kasturibaipet, Vijayawada- 520010
2.	Arunachal Pradesh State Pollution Control Board 'ParyavaranBhavan', Yupla Road, PappuNallah, Naharlagun – 791110 Arunachal Pradesh
3.	Assam State Pollution Control Board Bamunimaidan, Guwahati – 781021 Assam
4.	Bihar State Pollution Control Board PariveshBhawan, Plot No.N-B/2, Patliputra Industrial Area Patna-800023
5.	Chhattisgarh Environment Conservation Board ParyavasBhawan, North Block Sector-19 NayaRaipur – 492 002 Chhattisgarh
6.	Goa State Pollution Control Board, Nr. Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao - Bardez Goa - 403511
7.	Gujarat State Pollution Control Board Sector 10-A, Gandhi Nagar – 382043 Gujarat
8.	Haryana State Pollution Control Board C-11, Sector 6, Panchkula, Haryana 134109 Haryana
9.	Himachal Pradesh State Pollution Control Board ParyavaranBhavan, Phase III, New Shimla – 171009 Himachal Pradesh
10.	J&K State Pollution Control Board, Parivesh Bhawan, Shiekh-ul-Campus, behind Govt. Silk Factory, Raj Bagh, Srinagar(J&K)

ADDRESS LIST OF SPCBs/PCCs

11.	Jharkhand State Pollution Control Board T.A Building, HEC Campus, P.O. Dhurwa Ranchi – 834004 Jharkhand
12.	Karnataka State Pollution Control Board ParisaraBhavan, 4 <sup>th</sup> & 5 <sup>th</sup> floors Church Street, Bangalore – 560 001 Karnataka
13.	Kerala State Pollution Control Board Plamoodu Junction, Pattam Palace P.O. Thiruvanathapuram – 695004 Kerala
14.	Maharashtra State Pollution Control Board Kalpataru Point, 3 <sup>rd</sup> & 4 <sup>th</sup> floors Sion Matunga Scheme Road No. 6 Opp. Cine Planet, Sion Circle, Sion (E), Mumbai 400 022 Maharashtra
15.	Madhya Pradesh State Pollution Control Board ParyavaranParisar, E-5 Arera Colony Bhopal – 462016 Madhya Pradesh
16.	Manipur State Pollution Control Board Lamphelpat, Imphal West D.C. Office Complex – 795004 Manipur
17.	Meghalaya State Pollution Control Board Arden, Lumpyngngad, Shillong – 793014 Meghalaya
18.	Mizoram State Pollution Control Board New Secretariat Complex, Khatla, Thlanmual Peng, Aizwal Mizoram- 796001
19.	Nagaland State Pollution Control Board Signal Point, Dimapur, Nagaland – 797112 Nagaland
20.	Odisha State Pollution Control Board ParibeshBhawan A-118, Nilakanta Nagar, Unit –VIII, Bhubaneshwar – 751012. Odisha

ADDRESS LIST OF SPCBs/PCCs

21.	Punjab State Pollution Control Board Nabha Road, ITI Rd, Adarsh Nagar, Prem Nagar, Patiala - 147001. Punjab
22.	Rajasthan State Pollution Control Board A-4 Institutional Area, JhalaneDungri Jaipur – 302004. Rajasthan
23.	Sikkim State Pollution Control Board State land Use & Environment Cell Govt. of Sikkim, Deorali, Gangtok, Sikkim
24.	Tamil Nadu State Pollution Control Board No. 76, Mount Salai, Guindy, Chennai - 600032. Tamil Nadu
25.	Telangana State Pollution Control Board ParyavaranBhavan A-3, Industrial Estate, Sanath Nagar, Hyderabad – 500 018. Telangana
26.	Tripura State Pollution Control Board PariveshBhawan Pt. Nehru Complex, Gorkhabasti P.O., Kunjaban, Agartala, West Tripura - 799 006. Tripura
27.	Uttarakhand Environment Protection & Pollution Control Board Gaura Devi Bhawan, 46 B IT Park Sahastradhara, Dehradun, Uttarakhand- 248001
28.	Uttar Pradesh State Pollution Control Board 3 <sup>rd</sup> floor, PICUP Bhavan, VibhutiKhand, Gombi Nagar, Lucknow– 226010. Uttar Pradesh
29.	West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector III, Bidhan Nagar, Kolkata - 700 106
30.	Andaman & Nicobar Islands Pollution Control Committee Department of Science & Technology Dollyganj Van Sadan, Haddo P.O., Port Blair-744102 Andaman & Nicobar

ADDRESS LIST OF SPCBs/PCCs

31.	Chandigarh Pollution Control Committee ParyavaranBhawan Madhya Marg, Sector - 19 B, Chandigarh – 160019.
32.	Daman, Diu & Dadra Nagar Haveli Pollution Control Committee Office of the Deputy Conservator of Forests Moti Daman, Daman – 396220. Daman & Diu
33.	Delhi Pollution Control Committee 4 <sup>th</sup> floor, ISBT Building, Kashmeri Gate, Delhi - 110006. Delhi
34.	Lakshadweep Pollution Control Committee Lakshadweep Administration Department of Science, Technology & Environment Kavarati – 682555. Lakshadweep
35.	Puducherry Pollution Control Committee Department of Science, Technology & Environment Housing Board Complex, 3 <sup>rd</sup> floor, Anna Nagar, Pondichery – 600 005



**GPCB**

**A.V. SHAH**  
Member Secretary

**GUJARAT POLLUTION CONTROL BOARD**  
**PARYAVARAN BHAVAN**

**Sector-10-A, Gandhinagar-382010**

Annexure - 3

07/05/2020

To,  
All the ROs  
Gujarat Pollution Control Board

Dear All (ROs)

In the present Pandemic COVID 19 situation industries are in operation with permission from the District Administration with essential staff. Under the circumstances, you are informed to make aware all the Industries Associations and individual industries to take utmost care in handling hazardous chemicals using trained men-power only so that untoward incidence can be averted and environmental safety is ensured.

Ensure close monitoring of situation so that the environmental norms are not violated.

With regards,

**(A.V. Shah)**  
Member Secretary

**Clean Gujarat Green Gujarat**

E-mail : [ms-gpcb@gujarat.gov.in](mailto:ms-gpcb@gujarat.gov.in), [membersecretarygpcb@gmail.com](mailto:membersecretarygpcb@gmail.com)

Phone (Office) : +91-23232152, Website : <http://gpcb.gujarat.gov.in>



**GPCB**

**A.V. SHAH**  
Member Secretary

**GUJARAT POLLUTION CONTROL BOARD**  
**PARYAVARAN BHAVAN**  
**Sector-10-A, Gandhinagar-382010**

Annexure - 4

07/05/2020

To,

**The Director,**  
**Directorate of Industrial Safety & Health**  
3<sup>rd</sup> & 5<sup>th</sup> Floor, Shram Bhavan  
Nr. Gun House, Khanpur,  
Ahmedabad. (Gujarat)

E mail: do-dish-ahd@gujarat.gov.in; dish-abd@gujarat.gov.in

Dear Sir,

In the present Pandemic COVID 19 situation industries are in operation with permission from the District Administration with essential staff. Under the circumstances, you are requested to make aware all Industries Associations and individual industries to take utmost care in handling hazardous chemicals using trained men-power only so that untoward incidence can be averted and environmental safety is ensured.

Further, you are requested to issue SOPs for working with essential staff if you deem fit. Also ensure close monitoring of situation so that the safety norms are not violated leading to environmental damage.

With regards,

**(A.V.Shah)**  
**Member Secretary**

Copy to :

1. All the Regional Officers, Gujarat Pollution Control Board – Regional Offices
2. All the Unit Heads, Gujarat Pollution Control Board, Gandhinagar

**Clean Gujarat Green Gujarat**

E-mail : [ms-gpcb@gujarat.gov.in](mailto:ms-gpcb@gujarat.gov.in), [membersecretarygpcb@gmail.com](mailto:membersecretarygpcb@gmail.com)

Phone (Office) : +91-23232152, Website : <http://gpcb.gujarat.gov.in>

To take utmost care in handling hazardous chemicals using men power only so that untoward incidence can be avetred and environment safety is ensured.

Bhavdip R Gajjar(GoG-GPCB Dept.)

Thu 5/7/2020 10:00 PM

Sent Items

To: dydish-val <dydish-val@gujarat.gov.in>;

 1 attachments (909 KB)

letter to DISH.pdf;

in the present Pandemic COVID 19 situation industries are in operation with permission from the district Administration with essential staff. Under the circumstances, you are hereby informed to make aware all individual industries to take utmost care in handling hazardous chemicals using men power only so that untoward incidence can be avetred and environment safety is ensured.

Further, You are requested to issue SOPs for working with essential staff if you deem fit. Also ensure close monitoring of situation so that the safety norms are not violated leading to environment damage.

With Regards

B. R. Gajjar  
Regional Officer  
Gujarat Pollution Control Board  
Vapi



**GPCB**

**A.V. SHAH**  
Member Secretary

**GUJARAT POLLUTION CONTROL BOARD**  
**PARYAVARAN BHAVAN**  
**Sector-10-A, Gandhinagar-382010**

07/05/2020

To,

**The Director,**  
**Directorate of Industrial Safety & Health**  
3<sup>rd</sup> & 5<sup>th</sup> Floor, Shram Bhavan  
Nr. Gun House, Khanpur,  
Ahmedabad. (Gujarat)

E mail: do-dish-ahd@gujarat.gov.in; dish-abd@gujarat.gov.in

Dear Sir,

In the present Pandemic COVID 19 situation industries are in operation with permission from the District Administration with essential staff. Under the circumstances, you are requested to make aware all Industries Associations and individual industries to take utmost care in handling hazardous chemicals using trained men-power only so that untoward incidence can be averted and environmental safety is ensured.

Further, you are requested to issue SOPs for working with essential staff if you deem fit. Also ensure close monitoring of situation so that the safety norms are not violated leading to environmental damage.

With regards,

**(A.V.Shah)**  
**Member Secretary**

Copy to :

1. All the Regional Officers, Gujarat Pollution Control Board – Regional Offices
2. All the Unit Heads, Gujarat Pollution Control Board, Gandhinagar

**Clean Gujarat Green Gujarat**

E-mail : [ms-gpcb@gujarat.gov.in](mailto:ms-gpcb@gujarat.gov.in), [membersecretarygpcb@gmail.com](mailto:membersecretarygpcb@gmail.com)

Phone (Office) : +91-23232152, Website : <http://gpcb.gujarat.gov.in>

# Fw: Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020.

Bhavdip R Gajjar(GoG-GPCB Dept.)

Wed 7/8/2020 2:35 PM

To:dkvasavadydish16@gmail.com <dkvasavadydish16@gmail.com>;

Respected Sir,

Kindly reply in context with the trailing e-mail dated 22.06.2020 regarding the letter for Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020 along with attachment of Hon'ble NGT Order. So you are requested for the complaine of the same. Kindly treat this e-mail as urgent.

With Regards

B. R. Gajjar  
Regional Officer  
Gujarat Pollution Control Board  
Vapi

---

**From:** Bhavdip R Gajjar(GoG-GPCB Dept.)

**Sent:** Wednesday, July 8, 2020 2:33 PM

**To:** dydish-val

**Subject:** Re: Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020.

Respected Sir,

Kindly reply in context with the trailing e-mail dated 22.06.2020 regarding the letter for Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020 along with attachment of Hon'ble NGT Order. So you are requested for the complaine of the same. Kindly treat this e-mail as urgent.

With Regards

B. R. Gajjar  
Regional Officer  
Gujarat Pollution Control Board  
Vapi

---

**From:** Bhavdip R Gajjar(GoG-GPCB Dept.)

**Sent:** Monday, June 22, 2020 11:29:32 AM

**To:** dydish-val

**Subject:** Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020.

Respected Sir,

Please find the attachment enclosed here with regarding the letter for Submission of Compliance of Hon'ble NGT Order in O.A. No.22/2020 along with attachment of Hon'ble NGT Order. So you are requested for the complaine of the same.

With Regards

8/17/2020

Fw: Submission of Compliance of Hon'ble ... - Bhavdip R Gajjar(GoG-GPCB Dept.)

B. R. Gajjar  
Regional Officer  
Gujarat Pollution Control Board  
Vapi



**GUJARAT POLLUTION CONTROL BOARD**  
**PARYAVARAN BHAVAN**  
**Sector-10-A, Gandhinagar-382010**

**A.V. SHAH**  
**Member Secretary**

No:GPCB/BRCH-B/CCA-217(3)/ID48440/562645

Dt. 20/06/2020

To,  
The Director,  
Directorate of Industrial Safety & Health (DISH)  
3rd & 5th Floor, Shram Bhavan  
Khanpur, near gun house  
Ahmedabad 380001

Dear Sir,

This has reference to para 14 of the order dated 08.06.2020 passed by Hon'ble National Green Tribunal in Original Application No.22/2020 (the matter of Aryavrat Foundation through its President Applicant(s) Versus Yashyashvi Rasayan Pvt. Ltd. & Anr) which is reproduced below:

"Since this tragedy follows so close on the heels of a similar one (in Vizag).., it may be necessary to ensure that risk studies are duly undertaken by all industries in the country dealing in the country dealing with the hazardous chemicals and their on-site off-site plans are operational and mock drills are carried out for testing the same. The State PCBs, concerned District Magistrates, CIFs of the industries Departments may ensure the same and the nodal agency for the purpose will be the State PCBs, which may be monitored by the CPCB in an appropriate manner."

Further, Central Pollution Control Board has already issued directions under Section 18(1) (b) of the Water act, 1974 and Section 18 (1) (b) of the Air Act , 1981 on 07.11.2017 for effective implementation of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 and communication dated 08.05.2020 regarding strict safety precautions to be taken by the industrial units before resuming operations.

In view of above, it is requested to ensure the necessary actions are taken in compliance to order passed by Hon'ble NGT.

The action taken report shall be submitted to Central Pollution Control Board at the earliest under intimation to this office.

With regards,

For & on behalf of GPCB

(A.V.Shah)  
Member Secretary

Copy to :

1. All District Collectors – for necessary action.
2. All Regional Officers, GPCB – for follow-up.

**Clean Gujarat Green Gujarat**

E-mail : [ms-gpcb@gujarat.gov.in](mailto:ms-gpcb@gujarat.gov.in), [membersecretarygpcb@gmail.com](mailto:membersecretarygpcb@gmail.com)

Phone (Office) : +91-23232152, Website : <http://gpcb.gujarat.gov.in>

**Accident Report**

<b>1</b>	<b>Name &amp; Address of Industries</b>	Shakti Bio Science Ltd., Plot No:411/1, Lic Sector, Gidc Estate, Dist : Valsad
<b>2</b>	<b>Subject</b>	Accident occurred in the M/S Shakti Bio Science Ltd, on 08/08/2020
<b>3</b>	<b>Products</b>	Tetra Iso Propyl Titanate (TIPT), Tetra Butyl Titanate (TNBT), Lansoprazole Sulphate , Amlodipene Besylate, Omeprazole Sulphide, Pentoprazole Sodium, Losartan Potassium, Tramadole Hydrochloride, Citalopram Hydrobromide, Fluconazole , Meta Phenoxy Benzaldehyde (MPBD) As mentioned CCA order AWH-84900 issued on 18/07/2017 and valid up to 31/12/2021
<b>4</b>	<b>GPCB Permission statuses</b>	CC&A is obtained for manufacturing of above said product valid up to 05/04/2023
<b>5</b>	<b>Date &amp; Time of incident</b>	08/08/2020 on 11:30 hours
<b>6</b>	<b>Date &amp; Time of Inspection</b>	08/08/2020 on 12:30 hours
<b>7</b>	<b>Reason for Incident</b>	Contacted person Shree Rajuprashad Khuntia informed that actual reason of fire is still not identified but fire may be occurred due to short circuit in pharma plant on prima facie
<b>8</b>	<b>Causality</b>	No fatality and no injuries
<b>9</b>	<b>Environmental issue</b>	<ul style="list-style-type: none"> <li>• Heavy Volatile Organic compound (VOC) Emission in prevailing wind direction (SW to NE) towards just adjoining unit M/s. Grauer &amp; Weil (India) Limited, Plot No. 407, 2nd Phase, G.I.D.C. VAPI &amp; M/s. Aarti Industries Ltd. – Amine Division, GIDC Vapi, Valsad (360 meters away)</li> <li>• Generated contaminated water during fire fighting operation is going into open chamber of GIDC storm water drain outside unit premises</li> <li>• Very heavy i.e. Sever + black smoke observed and situation of Ambient Air Quality was sever +/- emergnrcy</li> </ul>
<b>10</b>	<b>Pollution Level Monitoring</b>	<ul style="list-style-type: none"> <li>• VOC has been monitored by instant VOC meter within premises &amp; surrounding area of factory premises.</li> <li>• Ambient air quality monitoring was carried out in upwind and down wind direction.</li> <li>• Sample of contaminated water generated during fire fitting is collected.</li> </ul>
<b>11</b>	<b>Results</b>	<p>Ambient Air Quality monitoring station was kept at location:  [1] Aarti Industries Ltd. – Amine Division (located at a distance about 360 m in downwind direction)  [2] ) Shree Krishna Traders (located at a distance about 180 m in upwind direction)  Results of AAQMS are as <b>annexure 1</b>.</p> <p>Moreover to verify VOC in surrounding area , a VOC meter was used &amp; its readings are as follows:</p>

		Sr. No.	Time (hours)	Location	Prevailing wind direction	Reading in ppm	Approximate distance in (m) from the incident location
		1	13:10	M/s.Grauer & weil (india) Ltd	Downwind direction	139.5 (maximum)	10 meter
		2	14:30	M/s. Padam Plastic	Downwind direction	28	150
		3	15:00	M/s. Chaabria Textile processors Pvt Ltd.	Downwind direction	20	210
		4	16:40	M/s. Setco Chemicals india pvt ltd	Downwind direction	0.3	540
		5.	17:05	M/s. Hariram Industries	Downwind direction	0.2	630
		6.	17:30	Shree Krishana traders	Upwind Direction	0.0	200
		7.	17:45	M/s.Grauer & weil (india) Ltd	Downwind direction	2.9	10
		8.	17:50	M/s. Shakti Bio Science Ltd.	At incident place	1.8	0
<b>12</b>	<b>Warning</b>	<ul style="list-style-type: none"> <li>Unit M/s. Ganesh Polychem Limited, PLOT NO.408, PHASE-II, GIDC Vapi, Dist. Valsad have on precautionary stopped their industrial operation from 12 noon to 3 p.m. &amp; asked their workers to gather at their designated assembly point &amp; outside the gate and after 3 p.m. restated industrial operation .</li> <li>In M/s. Grauer &amp; Weil (India) Limited, Plot No. 407, 2nd Phase, G.I.D.C. VAPI (adjoining plant), they have stopped their industrial operation gave leaves to 98 their workers &amp;</li> </ul>					
<b>13</b>	<b>Reason for evacuation</b>	High emission of VOC due to fire in MPBD (block - A) plant, and blast of drums during fire which was also occurred of those drums					
<b>14</b>	<b>Chemical involved</b>	<ul style="list-style-type: none"> <li>Recovered solvents storage tanks (3 nos) which are partly filled with toluene, EDC and Benzaldehyde</li> <li>Approx. 150 drums 200 liters each filled with in-process materials stored in storage area</li> <li>material taken into distillation 4 assembly which are in</li> </ul>					

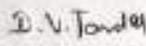
		operation before fire
15	<b>Statuses</b>	Fire is completely extinguished, VOC and smoke emission is almost stopped and situation is under control at 17: 30 hrs
16	<b>Observation</b>	<p>This unit is visited w.r.to fire occurred in the factory premises of the unit &amp; observed that fire started at 3r floor of pharma plant i.e. MPBD plant and in this plant &amp; upon enquiring it revealed that out of 20 reactors, in 4 reactors distillation of MPBD was going on. The unit has obtained CCA from the board for manufacturing of Tetra Iso Propyl Titanate (TIPT), Tetra Butyl Titanate (TNBT), Lansoprazole Sulphate , Amlodipene Besylate, Omeprazole Sulphide, Pentoprazole Sodium, Losarton Potassium, Tramadol Hydrochloride, Citalopram Hydrobromide, Fluconazole , Meta Phenoxy Benzaldehyde (MPBD).</p> <p>On investigation, it is come to know that the plant was restarted in July-2020 after of COVID-19 situation. During inspection there was dense smoke emission from the pharma plant which is spreading in the prevailing wind direction (SW to NE). Due to prevailing wind direction, fire was also spread into API plant and common storage area provided for recovered solvent storage, in-process material storage area.</p> <ul style="list-style-type: none"> <li>• Fire has occurred in block-A [Pharma Block].</li> <li>• In block –B [API block] partly damage observed i.e. falls ceiling, window glass broken, DM water plant &amp; AHU (Air Handling Unit) damaged.</li> <li>• In block-C [pharma block] shed observed damaged in some part. As per instruction of fire department entry for detail inspection is restricted on precautionary measures.</li> </ul> <p>On record verification of the unit it is observed that the main chemicals like EDC, toluene, bezaldehyde, aluminium chloride, chlorine, soda ash, phenol, caustic flakes, MDC, acetone, carbon, IPA, hyflow, HCL, MPBD intermediates are handled by the unit as Raw material, intermediate and products. On investigation it is came to known that unit had tanks storage to the pharma plants for recovered solvents: toluene, EDC and Benzaildehyde which are burnt during fire incident.</p> <p>On discussion with industry representatives, preliminary it seems that fire accident might have occurred due to short circuit in electric panal in pharma plant followed by fire in common storage area for recovered solvents, in process materials and then in API plant.</p>

	<p>Due to fire occurrence the dense cloudy black smoke is emitting from the incident area and spreading in prevailing wind direction towards M/S. Grauer &amp; Weil (India) Limited, Plot No. 407, 2nd Phase, G.I.D.C. VAPI and M/S Aarti Industries Ltd. – Amine Division.</p> <ul style="list-style-type: none"> <li>• Approximately 9 no.s of firefighting tenders already reached from nearby industries, Vapi, Valsad Nagar Palika, Sarigam, Daman, Selvas at the incident site &amp; they were used to combat fire by multiple trips with water and foam.</li> <li>• Member of LCG, was at help &amp; fire tenders from different industries Bayer Vapi Pvt. Ltd., UPL Vapi, Hubergroup India Private Ltd., Alok Industries, Atul Ltd, Welspun India Ltd., Damanganga Industrial Park came for help to combat fire.</li> </ul> <p>The incident was happen at about 11:30 Hrs. During inspection strong, intense VOC is sensed in and around the factory premises due to which eye irritation is also felt. Due to intense VOC and blast of material storage drums and reactor drums, it is not possible to enter unit premises. During inspection VOC was measured in Ambient Air by VOC meter by at different location at different time as mention above in point no.11.</p> <p>The ambient air monitoring is also carried out at two locations to observe the ambient air quality around the incident area. (1) Aarti Industries Ltd. – Amine Division (located at a distance about 360 m in downwind direction) &amp; (2) Shree Krishna Traders (located at a distance about 180 m in upwind direction). The measured ambient air quality is attached herewith. The fire has been extinguished completely by 17:45 Hrs and VOC level in ambient is observed slight.</p> <p>Pharma plant and its machinery (4 distillation assembly, tray dryer – 2 nos., F.B.D. – 1 no., V.T.D. – 1 no., cooling tower – 1 no., centrifuges – 5 nos., Receivers – 10 nos., Electric panel) and reactors are completely burnt during fire. In API plant, 2 reactors, 2 no of centrifuged, 1- A.H.U. are burnt. There was no major damage to boiler. Also there is damage to office building. There was damage to ETP units and laboratory during inspection.</p> <p>There was no fatality or injury during this incident as all employees and workers are evacuated from pharma plant immediately as the fire occurs.</p>
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	<p>During inspection one sample of waste water generated during firefighting activity is collected from the storm water drain located in front of unit, which is leading to outside GIDC storm water drain.</p> <p>Unit has PLI policy of The Oriental Insurance Company Limited, Policy no. 172200/48/2021/1138 which is valid from 15:34 on 29/06/2020 to midnight of 28/06/2021.</p> <p>The following written instructions are given to unit during inspection:</p> <ol style="list-style-type: none"> <li>1. You are directed to submit accident report in the prescribed format.</li> <li>2. Take all necessary measures to safely remove all remaining in-process material/ intermediate materials considering requisite process safety aspects.</li> <li>3. Ensure safely collection of residues of chemicals / hazardous &amp; other wastes generated from accident, and dispose the same as per provisions of hazardous waste rules under intimation to the board.</li> <li>4. Take all necessary measures to ensure safety of all reactor vessels, equipments etc. to prevent further mishappening and environment damage.</li> <li>5. You shall submit Form - 11 under HWM Rules, 2016 to R.O-Vapi &amp; Head Office - Gandhinagar immediately</li> <li>6. Contaminated wastewater from firefighting activity is observed being discharged into GIDC storm water drainage through the storm water drainage of unit. Unit has been instructed to lift all the contaminated wastewater from drainage and send to CETP-Vapi.</li> <li>7. Carry out safety audit/ HAZOP study that shall include environment aspects at the earliest and submit the same to the board.</li> </ol>
--	--

Inspecting team:

  
T.N. Rama  
S.S.A.

  
Deval V. Tandel  
A.E.E.

  
H.M. Gajjar  
S.S.O.

  
B.R. Gajjar  
R.O. - Vapi

### Annexure-1

Sr. No.	Parameter	Unit	Permissible limit	Measurement Method	Results AAQM on Upwind Side	Results AAQM on Downwind Side	Method Detection Limit
1	Particulate Matter(Size less than 10 µm) PM10(4hrs)	µg/m <sup>3</sup>	100	IS 5182 Part-23	86	459	5.0 µg/m <sup>3</sup>
2	Particulate Matter(Size less than 2.5µm) PM2.5(4hrs)	µg/m <sup>3</sup>	60	Lan SOP No.UERL/AIR/SOP/11	29	247	5.0 µg/m <sup>3</sup>
3	Sulphur Dioxide(SO <sub>2</sub> ) (4hrs)	µg/m <sup>3</sup>	80	IS 5182 Part-2	14.5	18.44	5.0 µg/m <sup>3</sup>
4	Nitrogen Dioxide(NO <sub>x</sub> ) (4hrs)	µg/m <sup>3</sup>	80	IS 5182 Part-6	21.6	46.0	4.0 µg/m <sup>3</sup>
5	Carbon Monoxide(CO) (Grab sample)	mg/m <sup>3</sup>	4.0	IS 5182 Part-10	0.2	1.43	0.01mg/m <sup>3</sup>
6	Benzene(C <sub>6</sub> H <sub>6</sub> )(4 hrs)	µg/m <sup>3</sup>	5.0	IS 5182 Part-11	N.D	14.6	1.0 µg/m <sup>3</sup>
7	VOC(Benzene,Toluene & Xylene)(4 hrs)	µg/m <sup>3</sup>	--	IS 5182 Part-11 2006,RA:2017	21.5	672	1.0 µg/m <sup>3</sup>
8	Non Metane Hydro Carbon(Grab sample)	µg/m <sup>3</sup>	--	IS 5182 Part-17:1979 RA:2009	N.D	21.5	1.0 µg/m <sup>3</sup>
9	IPA(4 hrs)	µg/m <sup>3</sup>	--	IS 5182 Part-11 2006,RA:2017	N.D	331.63	1.0 µg/m <sup>3</sup>

Photographs take during inspection of M/s. Shakti Bioscience Ltd.









ANALYSIS REPORT FOR  
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board, Vapi  
C5/124, GIDC Vapi,  
Near Hotel Pritam,  
Vapi - 396 195  
Tele:(0260) 2432089

Sample ID:286158 - Analysis Completion:21/08/2020

Pharmaceuticals / LAB Inward : 53363

TEST REPORT

Test Report No. : 53363

Date: 21/08/2020

1. Name of the Customer : Shakti Bio Science Ltd. - 24371  
2. Address : 411/1, LIC SECTOR,GIDC ESTATE  
Vapi-396195, Taluka : Pardi, District : Valsad, GIDC : Vapi  
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)  
4. Sample Collected By : B.R.Gajjar, RO Head  
5. Quantity of Sample Received : 5 lit  
6. Code No. of the Sample : 286158  
7. Date & Time of Collection & Inwarding : 08/08/2020 , (1515 to 1515) & 10/08/2020  
8. Date of Start & Completion of Analysis : 10/08/2020 & 21/08/2020  
9. Sampling Point : flowing wastewater collected (generated during fire fighting activity) neat factory gate  
10. Flow Details (Remarks) : yes  
11. Mode of Disposal : into open chamber of storm water drain  
12. Ultimate Receiving Body : No generation of industrial wastewater  
13. Temperature on Collection : 30 & pH Range on pH Strip :@ 4 on pH strip  
14. Carboys Nos for : Barcode & Color & Appearance :Brown  
15. Water Consumption & W.W.G (KLPD) : Ind :101.900 , Dom :3.400 & Ind :21.800 , Dom :3.200

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	4.08
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	60
4	Fixed Dissolved Solids	mg/l	Gravimetric method. (2540 E APHA Standard Method	2 – 200000 mg/L	3645
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	435
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standar	1 - 2000 mg/l.	35.17
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	2084
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	606
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	9363
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	9.6
11	Phenolic Compounds	mg/l	4 Amino Antipyrine method without Chloroform Extra	0.1 – 50 mg/l	1.44
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	2060

**Laboratory Remarks** : Approved By:335-vig\_335 Dt.: 21/08/2020

H. M. Ganvit,SSO

**Field Observation** : flowing wastewater collected (generated during fire fighting activity) near factory gate.n.b aaqm is also carried out on upwind side(a) m/s shree krishna traders,silvasa road,chanod & down wind side(b)m/s aarti industries ltd.a.ine div.plot no.285/286/1,phase-II,gidc,vapi. to the fire accident place.

Note :

- \* - These parameters are NOT covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
- Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

**VOC reading during accident period at Various location.**

<b>Sr. No.</b>	<b>Time (hours)</b>	<b>Location</b>	<b>Prevailing wind direction</b>	<b>Reading in ppm</b>	<b>Approximate distance in (m) from the incident location</b>
1	13:10	M/s.Grauer & weil (india) Ltd	Downwind direction	139.5 (maximum)	10 meter
2	14:30	M/s. Padam Plastic	Downwind direction	28	150
3	15:00	M/s. Chaabria Textile processors Pvt Ltd.	Downwind direction	20	210
4	16:40	M/s. Setco Chemicals india pvt ltd	Downwind direction	0.3	540
5.	17:05	M/s. Hariram Industries	Downwind direction	0.2	630
6.	17:30	Shree Krishana traders	Upwind Direction	0.0	200
7.	17:45	M/s.Grauer & weil (india) Ltd	Downwind direction	2.9	10
8.	17:50	M/s. Shakti Bio Science Ltd.	At incident place	1.8	0

\*Measured by handi VOC Meter.

**AAQM Results at Upwind and Downwind Side**

Sr. No.	Parameter	Unit	Permissible limit	Measurement Method	Results AAQM on Upwind Side	Results AAQM on Downwind Side	Method Detection Limit
1	Particulate Matter(Size less than 10 µm) PM10(4hrs)	µg/m <sup>3</sup>	100	IS 5182 Part-23	86	459	5.0 µg/m <sup>3</sup>
2	Particulate Matter(Size less than 2.5µm) PM2.5(4hrs)	µg/m <sup>3</sup>	60	Lan SOP No.UERL/AIR/SOP/11	29	247	5.0 µg/m <sup>3</sup>
3	Sulphur Dioxide(SO <sub>2</sub> ) (4hrs)	µg/m <sup>3</sup>	80	IS 5182 Part-2	14.5	18.44	5.0 µg/m <sup>3</sup>
4	Nitrogen Dioxide(NO <sub>X</sub> ) (4hrs)	µg/m <sup>3</sup>	80	IS 5182 Part-6	21.6	46.0	4.0 µg/m <sup>3</sup>
5	Carbon Monoxide(CO) (Grab sample)	mg/m <sup>3</sup>	4.0	IS 5182 Part-10	0.2	1.43	0.01mg/m <sup>3</sup>
6	Benzene(C <sub>6</sub> H <sub>6</sub> )(4 hrs)	µg/m <sup>3</sup>	5.0	IS 5182 Part-11	N.D	14.6	1.0 µg/m <sup>3</sup>
7	VOC(Benzene,Toluene & Xylene)(4 hrs)	µg/m <sup>3</sup>	--	IS 5182 Part-11 2006,RA:2017	21.5	672	1.0 µg/m <sup>3</sup>
8	Non Metane Hydro Carbon(Grab sample)	µg/m <sup>3</sup>	--	IS 5182 Part-17:1979 RA:2009	N.D	21.5	1.0 µg/m <sup>3</sup>
9	IPA(4 hrs)	µg/m <sup>3</sup>	--	IS 5182 Part-11 2006,RA:2017	N.D	331.63	1.0 µg/m <sup>3</sup>

F. No. J-11011/235/2009- IA II (I)  
**Government of India**  
**Ministry of Environment and Forests**  
 (I.A. Division)

Paryavaran Bhawan  
 CGO Complex, Lodhi Road  
 New Delhi – 110 003  
 E-mail : [plahujarai@yahoo.com](mailto:plahujarai@yahoo.com)  
 Telefax: 011 – 2436 3973  
 Dated: July 8, 2009

To,  
 The Vice President (Works)  
 M/s Shakti Biosciences Limited  
 Plot no 411/1, LIC Sector,  
 GIDC Estate, Vapi-396195  
 Dist. Surat, Gujarat

**Sub: Expansion of bulk drugs & intermediates manufacturing unit at Plot no 411/1, LIC Sector, GIDC Estate, Vapi-396195, Dist. Valsad in Gujarat, by M/s Shakti Biosciences Limited –reg environmental clearance**

Sir,

This has reference to your letter no. GPCB/371/2008/ 25<sup>th</sup> July, 2008 received in the Ministry on 13.4.2009 along with application in the form of form-1 and pre-feasibility report seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Shakti Biosciences Limited are manufacturing organic titanates and bulk drugs and intermediates with capacity of 58.07 MTPM. It is proposed to enhance the capacity by addition of intermediates @ 100MTPM. The production capacity after expansion will be 158.07 MTPM. Besides, 64.260 MTPM of HCl (30%), 401.890 MTPM of AlCl<sub>3</sub> (23%) and KBr solution (23%) will be manufactured as by products. The unit is located at GIDC Estate, Vapi, District Valsad in Gujarat. No eco-sensitive areas are located within 10 km radius of the plant. Proposed expansion will be carried within the existing unit having land area of 3901 m<sup>2</sup>. The total cost of the project will be Rs. 8.26 crores.

3. Details of products along with their production capacity are given below:

Sr. No.	Product	Present Capacity (MTPM)	Proposed Capacity (MTPM)	Total Capacity (MTPM)
01	Tetra Butyl Titanate	25.0	00	25.0
02	Tetra Isopropyl Titanate	20.0	00	20.0
03	Lansoprazole Sulphate	0.9	00	0.9
04	Amlodipene Besylate	1.45	00	1.45
05	Omeprazole Sulphate	1.1	00	1.1
06	Pentoprazole	1.0	00	1.0

07	Losarton Potassium	1.92	00	1.92
08	Tramadole Hydrochloride	2.2	00	2.2
09	Citalopram Hydrobromide	1.5	00	1.5
10	Fluconazole	3.0	00	3.0
11	Meta Phenoxy Benzaldehyde	00	100 0	100 0
	<b>Total</b>	<b>58.07</b>	<b>100.0</b>	<b>158.07</b>
	<b>By products</b>			
01	HCl, 30%	0	64.260	64.26
02	AlCl3 solution, 23%	0	401.89	401.89
03	KBr solution, 23%	0	273.342	273.342

4. It is noted that water requirement of 101.90m<sup>3</sup>/day will be met from the GIDC water supply. The wastewater generation will be 24.995 m<sup>3</sup>/day. The existing effluent (17.75m<sup>3</sup>/d) are treated in ETP for primary, secondary and tertiary treatment and treated effluent are sent to CETP for further treatment and disposal. For the proposed expansion, the concentrated effluent stream (4.045 m<sup>3</sup>/d) will be treated in multi effect evaporator and condensate will be reused for industrial purpose. Domestic effluent (3.2 m<sup>3</sup>/d) will be disposed through septic tank/soak pit. Power requirement of 450 KVA will be met through the DGVCL. Fuel requirement for the 850kg/hour baby boiler will be FO (800 lts/day) and natural gas (1500 NM<sup>3</sup>/day). The company has installed 2 no. of DG sets of 100KVA and 200KVA capacity each. These will be discontinued and one no. of DG set of 500KVA capacity will be installed for emergency power back up.

5. The process emissions in the form of HCl will be controlled by two stage water and alkali scrubbing system. Stack height of 21m is proposed for the 850 kg/hr. boiler and stack height of 25m is proposed for the 3 Mt/hr boiler. Stack height of 10m is proposed for the DG set for dispersion of gaseous emissions.

6. Hazardous/ solid waste generation will be in the form of ETP waste (35 kg/day) and process waste (iron sludge) (0.06 Mt/yr.) will be sent to TSDF site, Vapi. Used/spent oil (0.30 kl/year) will be sold to MoEF approved recyclers or incineration. Discarded drums/carboys/liners/bags (350 nos./annum) will be supplied to MoEF approved recyclers. Distillation Residue (11.4 Mt/month) will be disposed by incineration at common hazardous waste incinerator. Process waste (potassium salt) (3.2 Mt/month) will be sold as by products/ to TSDF site for suitable treatment. Process waste (Ammonium Chloride) (390 Mt/yr.) will be sold. Spent catalyst/spent carbon/ hyflow (1.2 Mt/month) will be reused in the next batch or sent TSDF site for suitable treatment.

7. The project activity is listed at serial no. 5(f) of schedule of EIA Notification, 2006 and categorized under "A" or "B" category depending upon the location of the plant outside or inside the notified industrial area. In the instant case, the plant is located within the notified industrial area, GIDC Vapi and covered under category "B". But the Vapi is an identified critically polluted area, hence, as per general condition of EIA Notification, 2006, the proposal was appraised at centre.

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8. The Expert Appraisal Committee in its 95<sup>th</sup> Meeting held on 15<sup>th</sup> -17<sup>th</sup> June, 2009 recommended the project for environmental clearance. As the unit is located in the industrial estate, the public hearing/ consultation of the project is not required as per para 7 (i)-III (b) Stage (3) – public consultation of EIA Notification, 2006.

9. Based on the information submitted by the project proponent, the Ministry of Environment and Forests 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 Specific and General Conditions:

**A. SPECIFIC CONDITIONS:**

- i. The industrial effluent generation shall not exceed 21,795 m<sup>3</sup>/d. The concentrated stream (4,045m<sup>3</sup>/d) shall be treated in the Multiple Effect Evaporator and the condensate shall be used for industrial purpose. The dilute stream (17,750m<sup>3</sup>/d) in the existing project shall be given primary, secondary and tertiary treatment. The treated effluent shall be sent to CETP for further treatment. The treated effluent shall conform to the standards prescribed under Environment (Protection) Act, 1986. The domestic effluent (3.2 m<sup>3</sup>/d) shall be treated through septic tank/soak pit.
- ii. GPCB shall not permit any new discharges from new industries or expansion of existing industries in the area that lead to CETP till the said FETP meet the required standards and have adequate hydraulic capacities.
- iii. The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.
- iv. The process emissions in the form of HCl shall be scrubbed with two stage water and alkali scrubber. The gaseous emissions from the boiler and DG set shall be dispersed through stack of height as per CPCB /State Pollution Control Board standards. To mitigate the noise pollution acoustic treatment shall be given to the DG sets.
- v. The company shall carry out monitoring of HCl, Bromine and chlorine and data submitted to the Ministry /CPCB/State Pollution Control Board.
- vi. The proponent shall upload the status of compliance of the stipulated environmental clearance 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 State Pollution Control Board. The pollutant levels namely, SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) and HCl and VOC shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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- vii. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSD. The concerned company shall undertake measures for fire fighting facilities in case of emergency.
- viii. Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- ix. For control of fugitive emission following steps shall be followed :
  1. Closed handling system shall be provided for chemicals.
  2. Reflux condenser shall provided over reactor.
  3. System of leak detection and repair of pump/pipeline based on preventive maintenance.
  4. The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
- x. Solvent management shall be as follows :
  1. Reactor shall be connected to chilled brine condenser system
  2. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  3. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
  4. Solvents shall be stored in a separate space specified with all safety measures.
  5. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done
  6. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- xi. An area of 33% shall be developed as green belt. Selection of plants species shall be as per the Guidelines of CPCB.
- xii. The Company shall harvest surface as well as rainwater from the rooftops of the buildings and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water
- xiii. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.

- xiv. Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

**B. GENERAL CONDITIONS:**

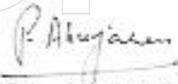
- i. The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. At no time, the emissions shall exceed the prescribed limits. In the event of 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 achieved.
- v. The gaseous emissions (NO<sub>x</sub>, SO<sub>2</sub>, HCl and SPM ) and Particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack monitoring for SO<sub>2</sub>, NO<sub>x</sub> and SPM shall be carried.
- vi. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the up wind and downwind direction as well as where maximum ground level concentrations are anticipated.
- vii. Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.

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- viii. The overall noise levels in and around the plant area 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 conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- ix. The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.
- x. The company will undertake all relevant measures for improving the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration.
- xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiii. The project authorities shall earmark adequate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- xiv. The implementation of the project vis-a-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.
- xv. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/representations, if any, were received while processing the proposal.
- xvi. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C 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 State Pollution Control Board.

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- xvii. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
  - xviii. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
  - xix. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  11. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
  12. Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.
  13. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003/ 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

  
(Dr.P.L. Ahujara)  
Director

-8-

Copy to:

1. The Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar-382 010, Gujarat.
2. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File.



(Dr.P.L. Ahujarai)  
Director

DynamicPDF



## GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

BY R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, framed under the Environmental (Protection) Act-1986.

And whereas Board has received CC& A application inward no: 117412 dated 09/01/2017 for the Consolidated Consent and Authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

**CONSENTS AND AUTHORISATION:**

(Under the provisions /rules of the aforesaid environmental acts)

To,  
 ✓ Mrs. SHAKTI BIO SCIENCE LTD,  
 PLOT NO. 411/1, LIC SECTOR,  
 GIDC ESTATE, VAPI-396 195,  
 TAL: PARDI, DIST: VALSAD.

1. Consent Order No.: AWH- 84900, Date of issue: 18/03/2017.
2. The consents shall be valid up to 31/12/2021 for use of outlet for the discharge of trade effluent & emission due to operation of industrial plant for manufacture of the following items/products:

Sr.No.	Product	Quantity MT/Month
1.	Tetra Butyl Titanate	25
2.	Tetra Isopropyl Titanate	20
3.	Lansoprazole Sulphate	0.9
4.	Amlodipene Besylate	1.45
5.	Omeprazole Sulphide	1.1
6.	Pentoprazole	1.0
7.	Losartan Potassium	1.92
8.	Tramadol Hydrochloride	2.2
9.	Citalopram Hydrobromide	1.5
10.	Fluconazole	3.0
11.	Meta Phenoxy Benzaldehyde	100
<b>Total</b>		<b>158.07</b>

3 **CONDITIONS UNDER THE WATER ACT:**

- 3.1 The quantity of total water consumption shall not exceed 105.3 KLD as per below break up as mentioned in form D submitted for consent application under Water Act-1974. Source of fresh water shall be only from GIDC supply.

- a) Domestic: 3.400 KLD
- b) Industrial: 101.900 KLD

- 3.2 The quantity of trade effluent discharge from the industry shall not exceed **17.75 KLD**
- 3.3 The quantity of Sewage effluent from the industry shall not exceed **3.2 KLD**.
- 3.4 Unit shall evaporate the entire quantity of effluent generated due to the manufacturing of Meta Phenoxy Benzaldehyde i.e. 4.045 KLD in the multi effect evaporator.

3.5 **TRADE EFFLUENT**

- 3.5.1 The treated effluent from the industrial unit shall conform to the CETP inlet norms mentioned in column No.2 as below:

PARAMETERS	CETP INLET NORMS
1.	2.
PH	6.5 TO 8.5
Temperature	40° C
Colour (pt.co.scale) in units	*
Suspended Solids	300 mg/l
Oil and Grease	10 mg/l
Phenolic Compounds	1 mg/l
Cyanides	0.2 mg/l
Fluorides	2 mg/l
Sulphides	2 mg/l
Ammonical Nitrogen	50 mg/l
Arsenic	0.2 mg/l
Total Chromium	2 mg/l
Hexavalent Chromium	0.1 mg/l
Copper	3 mg/l
Lead	0.1 mg/l
Mercury	0.01 mg/l
Nickel	3 mg/l
Zinc	5 mg/l
Cadmium	2 mg/l
Iron	3 mg/l
BOD (5 days at 20°C)	400 mg/l
COD	1000 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l
Total dissolved Solids	2100 mg/l

All efforts shall be made to remove color & unpleasant odor as far as practicable:

- 3.5.2 The final treated effluent conforming to the above standards shall be discharged into GIDC underground drainage system & shall ultimately be conveyed into tidal zone of river Damanganga through CETP M/s. Vapi Green Enviro Limited (VGEL), Vapi.



# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

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Website : www.gpcb.gov.in

- 3.5.3 The applicant shall either stop or curtail their production activities if the effluent is not adequately treated by CETP or CETP is not in functional.
- 3.5.4 Domestic effluent shall be disposed off through septic tank/soak pit system.

#### 4. CONDITIONS UNDER THE AIR ACT:

- 4.1 The following shall be used as fuel in Boiler & D.G. Sets.

Sr.No.	Fuel	Quantity
1	Natural Gas for 3 TPH Boiler	1500 M <sup>3</sup> /Day
2	HSD for 200 KVA D.G.Set	200 Lit/Day
3	Diesel for 500 KVA D.G.Set	200 Lit/Day

- 4.2 The flue gas emission through stack attached to D.G Set & Steam Boilers shall conform to the Following standards:

Stack no.	Stack attached to	Stack height in Meter	Air Pollution Control System	Parameter	Permissible Limit
1.	Boiler 3 TPH	25	---	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/NM <sup>3</sup> 100 ppm 50 ppm
2.	D. G. Set (200 KVA)	11	---		
3.	D.G.Set (500 KVA)	11	---		

- 4.3 The Process emission through various stacks/vent of reactors, process, vessel shall conform to the following standards:

Stack No.	Stack attached to	Stack height in Meter	Air Pollution Control system	Parameter	Permissible Limit
1.	Reaction Vessel	11	Water & Alkali Scrubber series	HCl Cl <sub>2</sub>	20 mg/NM <sup>3</sup> 09 mg/NM <sup>3</sup>

- 4.4 The concentration of the following substances in the ambient air within the premises of the industry and at a distance of 10 meters from the source (other than the stack / vent with height of more than 9 meters from the ground level) shall not exceed the following levels:

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in ug/M <sup>3</sup>
1.	Sulphur Dioxide (SO <sub>2</sub> )	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO <sub>2</sub> )	Annual 24 Hours	40 60

Clean Gujarat Green Gujarat

ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

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3.	Particulate Matter (Size less than 10 µm) OR PM <sub>10</sub>	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR PM <sub>2.5</sub>	Annual 24 Hours	40 60
5.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 Hours 1 Hour	02 04

- 4.5 The applicant shall provide porches, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4.6 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB (a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6 a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

**5 GENERAL CONDITIONS: -**

- 5.1. Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.
6. **Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules-2016, Form-2 (See rule 6(2))**
- 6.1 Number of authorization: **AWH- 84900, Date of issue: 18/03/2017.**
- 6.2 Reference of application No. **117412 and date: 09/01/2017.**
- 6.3 **M/s. SHAKTI BIO SCIENCE LTD,** is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at **PLOT NO. 411/1, LIC SECTOR, GIDC ESTATE, VAPI-396 196, TAL.: PARDI, DIST: VALSAD.**

**Details of Authorization:**

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/annum)
1.	Schedule-I 5.1	Collection, Storage, Transportation, Disposal by selling to registered reprocessors.	0.30 MT/Yr



## GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, **Gandhinagar** 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : [www.gpcb.gov.in](http://www.gpcb.gov.in)

2.	Schedule-I	33.1	Collection, Storage, Transportation, Disposal by selling to authorized recycler.	0,250 MT/Yr
3.	Schedule-I	35.3	Collection, Storage, Transportation, Disposal at TSDF-VWEMCL.	9 MT/Yr
4.	Schedule-I	37.1	Collection, Storage, Transportation, Disposal at TSDF-VWEMCL.	0.025 MT/Yr
5.	Schedule-I	28.1	Collection, Storage, Transportation, send for incineration or co-processing in cement industries.	78 MT/Yr
6.	Schedule-I	28.1	Collection, Storage, Transportation, Disposal at TSDF-VWEMCL.	0,06 MT/Yr
7.	Schedule-II	B10	Collection, Storage, Transportation, Disposal by selling to unit who has permission of rule-8 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.	390 MT/Yr
8.	Schedule-I	28.2	Collection, Storage, Transportation, Disposal at TSDF-VWEMCL.	14,40 MT/Yr

6.4 The Authorisation shall be valid for a period of 31/12/2021.

6.5 The Authorisation is subject to the following general and specific conditions:

**A. General Conditions under Hazardous and other Wastes (M&TM) Rules-2016**

1. The Authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The Authorisation or its renewal shall be produced for inspection at the request of an officer Authorised by the State Pollution Control Board.
3. The person Authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30<sup>th</sup> for the period ensuring 31<sup>st</sup> March of the year.

**B. Specific Conditions (Whichever is applicable)**

1. The authorised actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorisation.
2. Handing over of the hazardous and other wastes to the authorised actual user shall be only after making the entry into the passbook of the actual user.
3. In case of renewal of authorisation, a self-certified compliance report in respect of effluent emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.
4. The occupier of the facility shall comply Standard operating procedure/ guidelines published by MoEF&CC or CPCB or GPCB form time to time.



## GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

5. Unit shall comply provisions of E-Waste Management Rules-2016.

For and on behalf of  
Gujarat Pollution Control Board

D.P. Shah

(Smt. D.P. Shah)

Environmental Engineer

NO: GPCB/CCA-VSD-1070(4)/ID: 24371/

Issued to:  
M/S. SHAKTI BIO SCIENCE LTD,  
PLOT NO. 411/1, LIC SECTOR,  
GIDC ESTATE, VAPI-396 195,  
TAL: PARDI, DIST: VALSAD.

Signature Not Verified

Digitally signed by SHAH

DIPTI PRAKASH

Date: 2017.07.25 10:49:37 IST

Reason: Secure Document

Location: India

ISO 9001:2008 & ISO 14001 - 2004 Certified Organisation

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दि ओरिएण्टल इश्योरेंस कम्पनी लिमिटेड



THE ORIENTAL INSURANCE COMPANY LIMITED

## PUBLIC LIABILITY INDUSTRIAL POLICY SCHEDULE

Annexure - 10

Policy No. : 172200/48/2021/1138 Prev. Policy No. : 172200/48/2019/4959  
 Cover Note No : - Cover Note Date : -  
 Insured's Code : 91931427 Issuing Office code : 172200  
 Insured's Name : SHAKTI BIO SCIENCE LTD.  
 (GSTIN: 24AAHCS7723A1ZN) Issuing Office : DO VAPI (GSTIN: 24AAACT0627R2Z4)  
 Address : 411/1,LIC SECTOE GIDC VAPI-396195 Address : ABOVE SONY SHOWROOM  
 NEAR JEEVANDEEP HOSPITAL N.H.NO.8,  
 VAPI-396191  
 VAPI 396195 VAPI GUJARAT 396191  
 Tel./Fax/Email : / / / NA Tel./Fax/Email : 0260-2432563, 2425933 / /  
 172200@orientalinsurance.co.in

## Agent/Broker Details

Dev.Off.Code : NA000004896 MR. D.K. DESAI  
 Agent/Broker : BA0000064411 KAUSHIK K PARMAR  
 Address : RAM CHAWK, STATION RD, KILLA PARDI., VALSAD, GUJARAT, 396125  
 Tel/Fax/Email : 9824173286/kkp471970@gamil.com

STAMP DUTY PAID CONSOLIDATED AMOUNT  
 VIDE REVENUE DEPARTMENT ORDER NO.  
 GHM-2016-172-M-STP-122016-005-H-1-DAD-22-06-2018

Period of Insurance : FROM 15:34 ON 29/06/2020 TO MIDNIGHT OF 28/06/2021  
 Collection No & Dt : DC\_IND 8962001684 - 29/06/2020 GST INVOICE NO : 2419166654 UIN : 0  
 Gross Premium : 11,475 GST 2066 Stamp Duty : .5 Total Prem : 13,541  
 Coinsurance Details : NIL

Indemnity Limit : ANY ONE ACCIDENT Rs. 50,00,000.00  
 AGGREGATE DURING THE POLICY PERIOD : Rs. 50,00,000.00  
 Location No : 1 Location Name : 411/1,LIC SECTOE GIDC VAPI-396195  
 Address : DIST VALSAD-396195  
 VAPI  
 GUJARAT - 396195  
 Retroactive Date : 29/06/2020  
 Territory/Jurisdiction : INDIA / INDIA

Place : VAPI  
 Date : 29/06/2020



For and on behalf of

The Oriental Insurance Company Limited



Authorised Signatory

This is an electronically generated document (Policy Schedule). The Policy document duly stamped will be sent by post.

In case of any query regarding the Policy please call Toll Free No. 1800 11 8485 and 011 33208485.

CIN: U66010DL1947GOI007158 All the Amounts mentioned in this policy are in Indian Rupees

Page 1 of 2

IRDA Regn. No. 556 - Now you can buy and renew selected policies online at www.orientalinsurance.org.in

पंजीकृत एवं मुख्य कार्यालय : ए-25/27, आसफ अली रोड, नई दिल्ली-110 002.  
 वेबसाइट www.orientalinsurance.org.in देखें, टोल फ्री नं. : 1800 11 8485  
 कृपया अपनी पत्राचार पॉलिसी जारी कर्ता कार्यालय से करें।

Regd. & Head Office : A-25-27, Asaf Ali Road, New Delhi-110 002.  
 Visit us at : www.orientalinsurance.org.in, Toll Free No. : 1800 11 8485  
 Address all communications to policy Issuing Office

दि ओरिएण्टल इश्योरेंस कम्पनी लिमिटेड



THE ORIENTAL INSURANCE COMPANY LIMITED  
 Signer: ATUL JERATH  
 Date: 29/06/2020 15:49:53  
 Location: NOIDA  
 Reason: Signing Policy for OICL

Attached to and forming part of policy number 172200/48/2021/1138

The Insurance under this policy is extended to cover risks of : NIL

Total Premium in words : Indian Rupees Thirteen Thousand Five Hundred Forty-One Only

The Insurance under this policy is subject to terms and conditions given in the policy attached here to the following specific conditions

In the event of a claim under the policy exceeding Rs. 1 lac or a claim for refund of premium exceeding Rs. 1 lac, the insured will comply with the provisions of the AML policy of the Company. The AML policy is available in all our operating offices as well as Company's website.

Excess : 0.25% of AOA Limit with a maximum of Rs. 1,50,000/-

Voluntary Excess :

Financier Names are as per the list attached:

Not applicable

Warranted that in case of dishonour of premium cheque(s) the Company shall not be liable under the policy and the policy shall be void abinitio (from inception).

In witness whereof the undersigned being authorised by and on behalf of the Company has/have herein to set his/their hands at DO VAPI (GSTIN: 24AAACT0627R2Z4) on 29TH DAY OF JUNE 2020

Entered By : SUMAN BHARTI

Examined By : Ms PATEL ANJANA S.

Policy Printed By : 612251

Policy Printed On : 29-JUN-20 15:49:53

IP :

MAC :

For and on behalf of

The Oriental Insurance Company Limited



Authorised Signatory

Place : VAPI

Date : 29/06/2020



IRDA-REGNO-556

For and on behalf of

The Oriental Insurance Company Limited

This is an electronically generated document (Policy Schedule). The Policy document duly stamped will be sent by post.

In case of any query regarding the Policy please call Toll Free No. 1800 11 8485 and 011 33208485.

CIN: U66010DL1947GOI007158 All the Amounts mentioned in this policy are in Indian Rupees

IRDA Regn. No. 556 - Now you can buy and renew selected policies online at [www.orientalinsurance.org.in](http://www.orientalinsurance.org.in)



Authorised Signatory

Page 2 of 2

DO - VAPI ABOVE SONY SHOWROOM , NEAR JEEVANDEEP HOSPITAL.N.H.NO.8, VAPI-396191 , VAPI , 396191  
 The Oriental Insurance Company Ltd.  
 GST NO : 24AAACT0627R2ZA

RECEIPT

Office Code & Name : 172200 - DO VAPI Bank Code : 9100(C-172200-01)  
 Collection No. : 51-01/8962001684 Posted Doc No. : 8962001683  
 Collection Date : 29/06/2020 15:46 Posted Doc Dt. : 29/06/2020  
 Received with thanks From Sh./Smt./ M/s. : SHAKTI BIO SCIENCE LTD.  
 The Sum of : Indian Rupees Thirteen Thousand Five Hundred Forty-One Only  
 Towards the following : Premium collections

Sl No.	Dept. Code	Policy No.	Policy End/Ret/Decl/ Status	Dev. Off. Claim No.	Code	Source Code	Amount Collected	C/D	GL Code	SL Code	Pay Mode	Bank Name	Bank Branch	Instrument No.	Instr. Dt./CC Exp. Dt.
1	48	2021/1138	New Policy	NA0000004896	BA00000	64411	13,541.00	C	5083	AA0000000001	DC_I_IN			S44716844	29/06/2020
Total							13,541.00								

GST : Rs. 2066  
 GST NO Of Insured : 24AAHCS7723A1ZN  
 Policy Type / Zone : PUBLIC LIABILITY INDUSTRIAL



Note : For Payment by cheque , receipt will be valid subject to realisation of Cheque

- ૧ -



કલેક્ટર અને જિલ્લા મેજિસ્ટ્રેટ વલસાડની કચેરી  
જિલ્લા સેવા સદન, તિથલ રોડ, વલસાડ  
ફોન નં.૦૨૬૩૨-૨૫૩૬૧૩, ફેક્સ નં.૨૪૩૪૧૭  
e-mail:- collector-val@gujarat.gov.in

નં.ડીસીબી/એમએજી/કોરોના/વશી. ૪૮૪૮ / ૨૦૨૦

તા.૧૨/૦૪/૨૦૨૦

વંચાણે લીધું :- (૧) ગુજરાત સરકારશ્રીના આરોગ્ય અને પરિવાર કલ્યાણ વિભાગના તા.૧૩/૦૩/૨૦૨૦ના

નોટીફિકેશનથી ગુજરાત એપિડેમિક ડીસીઝ કોવિદ-૨૦૧૯ રેગ્યુલેશન-૨૦૨૦

(૨) અત્રેની કચેરીના હુકમ નં.ડીસીબી/એમએજી/કોરોના/લોકડાઉન/વશી.૩૬૬૭ થી

૩૬૬૮/૨૦૨૦ તા.૨૫/૦૩/૨૦૨૦ના હુકમ અન્વયે તા.૦૮/૦૪/૨૦૨૦ના રોજ

મળેલ કમીટીનો અભિપ્રાય

(૩) નાયબ નિયામકશ્રી ઔદ્યોગિક સલામતી અને સ્વાસ્થ્ય વલસાડના પત્ર

ક્રમાંક: નં.નિ.ઓ.સ. અને સ્વા./વલ/૬૬૮/૨૦૨૦ તા.૦૮/૦૪/૨૦૨૦

(૪) ડેઝીગ્નેટેડ ઓફીસર ખોરાક અને ઔષધ નિયમન તંત્ર વલસાડના પત્ર ક્રમાંક:મકવ/ મેન્યુ

માહિતી/૨૪૦૮ -૦૮/૨૦૨૦ તા.૦૭/૦૪/૨૦૨૦

(૫) મદદનીશ કમિશનરશ્રી ખોરાક અને ઔષધ નિયમન તંત્ર વલસાડના પત્ર ક્રમાંક:મકવ/ મેન્યુ

માહિતી/૨૪૧૭-૧૮ /૨૦૨૦ તા.૦૮/૦૪/૨૦૨૦

(૬) મુ.કા.અ. અને અધિ.ઈજનેરશ્રી (સં. અને નિ.) દ્રગુવીકલિ, વર્તુળ કચેરી, વલસાડના પત્ર

નં.વીએલસી/ટેક.૨/કોરોના/૨૦/ No. 1929 તા.૦૮/૦૪/૨૦૨૦

(૭) નેશનલ ડીઝાસ્ટર મેનેજમેન્ટ એક્ટ - ૨૦૦૫

**હુકમ :-**

હાલમાં નોવેલ કોરોના વાયરસ (COVID-2019) ને વર્લ્ડ હેલ્થ ઓર્ગેનાઈઝેશન ધ્વારા વૈશ્વિક મહામરી જાહેર કરવામાં આવેલ છે. ગુજરાત રાજ્યમાં પણ (COVID-2019) ના કેસો નોંધાયેલ છે. જે બાબતે ભારત સરકારશ્રી અને ગુજરાત સરકારશ્રી ધ્વારા સમાયતરે નોવેલ કોરોના વાયરસ (COVID-2019) ની ફેલાતો અટકાવવા માટે વિવિધ માર્ગદર્શિકા જાહેર કરવામાં આવેલ છે. ગુજરાત સરકારશ્રીના આરોગ્ય અને પરિવાર કલ્યાણ વિભાગના તા.૧૩/૦૩/૨૦૨૦ના નોટીફિકેશનથી ગુજરાત એપિડેમિક ડીસીઝ કોવિદ-૨૦૧૯ રેગ્યુલેશન-૨૦૨૦ જાહેર કરેલ છે. તેના અનુસંધાને જી.આઈ.ડી.સી. વિસ્તારના ઔદ્યોગિક એકમો અને ગૃહ ઉદ્યોગો બંધ કરવા અપીલ કરવામાં આવેલ હતી. વંચાણમાં લીધેલ ક્રમાંક - ૨ થી લોકડાઉન દરમિયાન ઔદ્યોગિક એકમો ચાલુ રાખવા બાબતની કમિટીનું ગઠન કરવામાં આવેલ છે.

વંચાણમાં લીધેલ - ૩ થી ૬ ના પત્રથી જણાવ્યા મુજબ હાલ ગંભીર સ્થિતિને પહોંચી વળવા Pharmaceutical, Intermediates Chemicals અને આનુસંગિક તેમજ આવશ્યક ચીજ વસ્તુઓ બનાવતા ઔદ્યોગિક એકમો જેવા કે સેનીટાઈઝર/ડીસફેક્ટન્ટ/હાઈડ્રોક્સી ક્લોરોકવીન સલફેટ (એ.પી.આઈ)- (COVID-19) માં સપ્લીમેન્ટરી ટ્રીટમેન્ટ માટે ઉપયોગી તેમજ રક્ષક દવાઓના ઉત્પાદકો અને તે માટે પેકેજિંગ યુનિટોમા (સામેલ લીસ્ટ મુજબ) ઉત્પાદન પ્રક્રિયા ચાલુ રાખવી જરૂરી છે આવા એકમોને ચાલુ રહે તે માટે ભલામણ કરેલ

છે. જેથી આ સાથે જણાવેલ (સામેલ) યાદીવાળા ઔદ્યોગિક એકમોને ચાલુ રાખવા નીચે જણાવેલ શરતોને આધીન હુકમ કરવામાં આવે છે.

**શરતો :-**

- (૧) કંપની સંચાલકોએ કોરોના વાપરસ (COVID-2019) ને દેહાતો અટકાવવા માટે સરકારશ્રી તરફથી જાહેર કરવામાં આવેલ માર્ગદર્શિકા મુજબ જરૂરી સેનીટાઇઝેશન અને ડાઈઝીનની વ્યવસ્થા કરી પુરતી તકેદારી રાખવાની રહેશે.
- (૨) કામની જગ્યાએ કંપની સંચાલકોએ સોશયલ ડિસ્ટન્સિંગ રાખી કામ યાપ તે બાબતની ગંભીરતાથી તકેદારી રાખવાની રહેશે જેથી કોરોના વાઈરસના સંક્રમણને અટકાવી શકાય
- (૩) જે યુનિટો ચાલુ રાખવાની પરવાનગી આપવામાં આવી છે તેવા સંચાલકોએ કામદારોને કંપની યુનિટ ખાતે રહેવાની, જમવાની તેમજ જરૂરી સેનીટાઇઝેશન વ્યવસ્થા પુરી પાડવાની રહેશે તથા યુનિટ સિવાય કામદારો બહાર આવન જાવન કરી શકશે નહી તેમજ કામદારો કંપની પ્રિમાઈસ રહેઠાણની જગ્યાએથી અન્ય સ્થળે આવન-જાવન કરતા જણાશે અથવા કામદારો પર નિયંત્રણ રાખવામાં કશુવાર ફરેલ કંપની સંચાલકો વિરૂધ્ધ કાયદેસરની કાર્યવાહી હાથ ધરવામાં આવશે. તેમજ બહાર પાડવામાં આવેલ જાહેરનામાની જોગવાઈઓ તથા નેશનલ ડિઝાસ્ટર મેનેજમેન્ટ એક્ટ - ૨૦૦૫ ની કલમ હેઠળ શિક્ષાને પાત્ર બનશે.



11/4/2020  
(સી.આર.ખરસાણ)  
જિલ્લા મેજિસ્ટ્રેટ, વલસાડ

પ્રતિ,

મેનેજરશ્રી .....

નકલ સવિનય સાદર રવાના :-

(૧) નાયબ સચિવશ્રી, ગૃહ વિભાગ, ગાંધીનગર

(૨) સંયુક્ત સચિવશ્રી આરોગ્ય અને પરીવાર કલ્યાણ વિભાગ, ગાંધીનગર

નકલ જયભારત સહ રવાના :- પોલીસ અધિક્ષકશ્રી, વલસાડ તરફ

નકલ જયભારત સહ રવાના :- મુખ્ય જિલ્લા આરોગ્ય અધિકારીશ્રી, વલસાડ તરફ જાણ સારૂ.

નકલ જયભારત સહ રવાના :-

(૧) જિલ્લા વિકાસ અધિકારીશ્રી વલસાડ

(૨) સબ ડીવીઝનલ મેજિસ્ટ્રેટશ્રી, વલસાડ / પારડી / ધરમપુર / વાપી

(૩) નાયબ પોલીસ અધિક્ષકશ્રી : વલસાડ / વાપી

(૪) કાર્યપાલક મેજિસ્ટ્રેટશ્રી : વલસાડ / પારડી / ધરમપુર / ઉમરગામ / કપરાડા / વાપી તરફ જાણ સારૂ.

(૫) તાલુકા વિકાસ અધિકારીશ્રી : વલસાડ / પારડી / ધરમપુર / ઉમરગામ / કપરાડા / વાપી તરફ જાણ સારૂ.

(૬) ચીફ ઓફીસરશ્રી : વલસાડ / પારડી / ધરમપુર / વાપી / ઉમરગામ તરફ જાણ સારૂ.

(૭) નાયબ નિયામકશ્રી ઔદ્યોગિક સલામતી અને સ્વાસ્થ્ય વલસાડ તરફ....

૨/ જાણ તથા પોલીસ અધિક્ષકશ્રી વલસાડને સંબંધિત કંપની વિગતો મોકલી આપવા સારૂ.....

Sr. No.	Unit Name & Address	Product	Manpower	Working Hrs (Shift)	Contact Person Name & Mo. No.
1	NETMETRIX CROP CARE LTD. P.NO. C-1/77/524, 100 SHED, GIDC, VAPI	AGRO CHEMICALS	35	3	SUBHASH DAS 9974035831
2	VALIANT ORGAMNICS LTD., 2908, 749-755, GIDC, SARIGAM	PHARMA & AGRO INTERMEDIATES	PER SHIFT 25	3	RAJESHBHAI 9909112468
3	CALIRON CHEMICALS PVT. LTD.	RAW MATERIAL FOR PHARMA IND.	20	1	SHASHI MENON 9820112312

4	SHREE SAUPARNIKA EXPORTS PVT. LTD. PLOT NO. 210, GIDC, UMBERGAON	COVER ALL APRON FOR DOCTOR	18	1	R. K. NAIR 9898728770
5	APOLLO INTERMEDIATES, 3005, PH-4, GIDC, VAPI	HI TACK ADHESIVE FOR ADHESIVE TAPES	10	1	KARAN DESAI 9979007055
6	ASQUARE CLOTHING PLOT NO. 253, GIDC, VAPI	MASK & APRON FOR DOCTOR	45	1	ANKUR PANCHAL 8888774808
7	ACCUHEALTH REMEDIES LLP, SHED NO.C-9, GIDC, UMBERGAON	SAFETY MASK	10	1	ANJANI JHA 9291076388
8	ALOK INDUSTRIES LTD., SR. NO. 148-150, VILL- MORAI, VAPI	DOCTOR SUIT & MASK FOR RELIENCE FOUNDATION	100	1	VIJAY 9727782675
9	VRAJ CHEMICAL, 790/2, GIDC, VAPI	SOLVENT & CHEM. FOR PHARMA IND.	5	1	VIKESH MEHTA 9824110958
10	SILOXANE AGGRANDIZE INNOVATIVE IND., 607, GIDC, GUNDLAV & 1097, DHAMDACHI	STRETCH BAND FOR MASK	14 EACH	1	HIMANSU DESAI 9825889588
11	SAI ABI INDUSTRIES PLOT NO. 27, SR. NO. 45/27, VIBRANT PARK, VAPI	NONWOVEN FACE MASK	12	1	PARIMALA 8390901823
12	COLORTEK (INDIA) LTD., PLOT NO. 239/1, WATER WORKS ROAD, ABRAMA, VALSAD	LIQUID COLORANT FOR PHARMA PLASTIC IND.	18	1	2632227595
13	EXCEL FOOD & BEVERAGES, SR. NO. 668, MOHANGAM, UMBERGAON	PACKAGE DRINKING WATER	8	1	DARSHAN DEORE 7778858696
14	SANDHYA ORGANICS CHEMICAL PVT. LTD. GIDC, VAPI	ALLUMINIUM PHOSPHIDE FOR CROP PROTECTION (GOVT. SUPPLY)	PER SHIFT 30	2	R.J.SHAH 9725260270
15	SANDHYA INDUSTRIAL CHEMICAL EXPORT PVT. LTD., 2809-10, GIDC, SARIGAM	PHARMA & AGRO CHEM. INTERMEDIATES CHEM. CONT. PLANT	PER SHIFT 15	2	ANIL KOLI 9879513543
16	PHARMA CHEMICAL IND., 2811, GIDC, SARIGAM	PHARMA & AGRO CHEM. INTERMEDIATES CHEM. CONT. PLANT	PER SHIFT 15	2	R J SHAH 9725260270
17	SWEET OM, 102/4, GIDC, SARIGAM	INKS FOR FOOD & PHARMA PACKAGING IND.	12	1	RASHMI RAJPUT 9979661133
18	PIDILITE INDUSTRIES LTD., PLOT NO. 74/74-1, 77-1, 77-2, 78/79, GIDC, VAPI	FMCG & PHARMACEUTICAL	36	1	ALPESH DESAI 9898040199
19	HERCULES PIGMENTS PVT. LTD., (U-1) & (U-2, GIDC, VAPI	ORGANIC PIGMENTS FOR PRINTING INKS	20	2	HEMANT PATEL 9825397376
20	TECHNO PLAST INDUSTRIES, PLOT NO. 76A/2, J-TYPE, GIDC, VAPI	ROLLERS FOR FOOD & PHARMA PACKAGING IND.	15	2	NILESH SINGH 7096188957

21	MICAS ORGANICS LTD, UNIT - 1 TO3, 5 & 8, GIDC, VAPI	PIGMENT & INETERMEDIATES FOR INK IND.	14 EACH	1	JIGNESH 9328336565
22	HIMALAYA POLYURETHENE PVT. LTD., PARDI PARIYA ROAD, PARDI	HOSPITAL MATTRESSES	18	1	NARESH JADHWANI 9727025252
23	PHOENIX FOILS PVT. LTD., PLOT NO. 3, GIDC, UMBERGAON	STEEL COILS & STEEL ITEMS FOR MEDICAL, OIL INDUSTRY	PER SHIFT 35	2	POORNIMABEN 9850895678
24	ALLURE GIFT WRAPS PVT. LTD., PLOT NO. 2914, PH-1, GIDC, VAPI	ANTI-BACTERIAL & FUNGAL PAPER FOR FOOD & MEDICAL PRODUCTS	35	1	MOHAN RARSINGHANI 9819837267
25	YASHO INDUSTRIES PLOT NO. 2514/2515, PH-4, GIDC, VAPI	FOOD ANTI OXIDANT & ANIMAL FEED & FOOD INGREDIANTS	85 PER SHIFT	2	PARAG ZAVERI 9820644645
26	KHEMKA GLASS PRODUCTS PVT. LTD., PLOT NO. 68/1, GIDC, VAPI	PHARMACEUTICAL PRODUCTS FOR GLASS	PER SHIFT 35	2	G. ANANTARAMAN 9924468367
27	INDIAN SCIENTIFIC GLASS INDUSTRIES, PLOT NO. 67, GIDC, VAPI	PHARMACEUTICAL PRODUCTS FOR GLASS	PER SHIFT 45	2	NAGIN LAD 9427128471
28	APAR INDUSTRIES LTD, SR. NO. 6074, , 2228, 1991, 2219, 2221, 6341, KHATALWADA & UMBERGAON UNIT PLOT NO. 148/3, 157, 158, GIDC, UMBERGAON	E-BEAM OPERATION FOR CABLE FOR MED.	PER SHIFT 10 KHATLWADA PER SHIF 10 UMBERGAON	2	JALADHI OZA 9099050146
29	ORIENT ORGANICS, 5306/2, GIDC, VAPI	SOLVENT (IPA) DISTILLATION FOR PHARMA IND.	PER SHIFT 5	2	DINESH PATEL 9825046716
30	ABHISHEK GLASS INTERNATIONAL PVT. LTD., PLOT NO. 131, PH-2, GIDC, VAPI	GLASS DROPPER, VIALS FOR PHARMA IND.	10	1	
31	DALMIA POLYPRO INDUSTRIES PV. LTD., PLOT NO. 780, 40 SHED AREA, GIDC, VAPI	PLASTIC RECYCLE	25	1	MAHESHBHAI 9374626691
32	RAULA ENGINEERING WORKS, PLOT NO. 706/1, GIDC, VAPI	FLIP TOP CAPS DIE & MOULD	5	1	NILANCHALA RAULA 9898490385
33	RAXON BIOMEDICAL, VALVADA	MEDICAL DEVICES	8	1	PRIYESH SODHA 9820448982
34	SHAH PULP & PAPER MILL PVT. LTD, 97, GIDC, VAPI	NEWS PRINT PAPER	PER SHIFT 40	3	MAHENDRA SHAH 9879530709
35	SHAH PAPER MILL LTD., UNIT- 3, 40 SHED, GIDC, VAPI	NEWS PRINT PAPER	PER SHIFT 40	3	ALPESH PATEL 9909666167

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36	ARYAN PAPER MILLS PVT. LTD., 177 & 178, PH-2, GIDC, VAPI	KRAFT PAPER	PER SHIFT 40	3	SUNIL SHAH 9998071110
37	NIMBUS PACKING LLP, S.NO. 249/1, BALITHA, VAPI	PACKAGING MAT. FOR PHARMA & FOOD	38	1	ANKIT GUPTA 9920586622
38	SEVEN -11 INDUSTRIES, PLOT NO. 214/1, ROAD, NO. 2, GIDC, SARIGAM	PRINTING INKS FOR FOOD & PHARMA IND.	5	1	RAMKRISHNA SALVE 9824159024
39	FRESNO & BAKERS FIELD, 2416, GIDC, UMBERGAON	HAND WASH, FLOOR CLEANER	12	1	CHIRAG TRIVEDI 9820017069
40	HIGHTECH CORPORATION LTD., A-1/ 912-914, UMBERGAON	PLASTIC BOTTLES FOR SENITIZER & PESTICIDES	PER SHIFT 24	2	CHANDRAKANT 9898814533
41	ORTHOTECH, P.NO.6, NH-8, NANDAVAL, VALSAD	ORTHOPAEDIC DEVICES	17	1	SUSHANT BANERJI 9824138288
42	ADG FILTER SCIENCE P.LTD., S.NO.338, BALDA	PHARMA FILTER CARTRIDGE	7	1	RAHUL LODHA 9970043377
43	SUPARNA CHEMICALS LTD., 656, 100 SHED, VAPI	RAW MAT. FOR DRUGS	PER SHIFT 21	2	RAMNATH MANDAL 9820124314
44	KALYANI INDUSTRIES, 1664, GIDC, SARIGAM	PEST CONTROL PRODUCT	15	1	KIRAN GARASE 8490023619
45	OMKAR CHEM,C-1-B/ 773, GIDC, VAPI	INORGANIC BULK DRUGS MAT.	PER SHIFT 11	2	G.K.PATEL 02602451478
46	RISHABH INTERMEDIATES, 5304, GIDC, VAPI	INTERMEDIATES FOR DRUG	PERSHIFT 10	2	RISSHABH 9426801272
47	KALPESH SYNTHETICS, DEHRI ROAD, UMBERGAON	FABRICS FOR DEFENCE	PER SHIFT 20	2	BHAVESH SHAH 02602562469
48	SURYA INDUSTRIES, 6306/2, GIDC, VAPI	PHARMA INTERMEDIATES FOR DRUG	PER SHIFT 10	2	PARAG DOSHI 9825405696
49	ESSEL MINING & IND. LTD., 165/166, GIDC, VAPI	FERRO ALLOYS FRO STEEL IND.	40	1	SANGITA SADAFULE 6356011119
50	SWADEV CHEMICALS, 5004/3, GIDC, VAPI	CHEMICALS FOR PHARMA IND.	PER SHIFT 13	2	RAMOLIA 9898998064
51	SHIV SHAKTI PHARMA CARE PVT. LTD., 924, GIDC, VAPI	BULK DRUG FOR VETERINARY	14	1	2602421005
52	EBURON ORGANICS (I) PVT. LTD. , 1/4, VAPI & 805, SARIGAM	PHARMA INTERMEDIATES	PER UNIT 12	1	RAJESH LAD 9825394597
53	OM BIO ENERGY, NH-8, PARNERA PARDI	BIO FUEL	8	1	9428021112
54	SURYA KIRAN CHEMICAL, GIDC, VAPI	PHARMA INTERMEDIATES	PER SHIFT 10	2	SATISH PATEL 9825146105
55	ALFA CHEM LABORATORIES, 2715, GIDC, UMBERGAON	SODIUM HYPO CHLORIDE	5	1	AMIT BHAVSAR 8154077847
56	SHREE SAI INDUSTRIES, 5/21, GIDC, SARIGAM	POLY ALUMINIUM CHLORIDE SOL. FOR PHARMA	5	1	PRAVESH PATEL 9979858713
57	KRISH CHEMICALS, 2501, GIDC, SARIGAM	PHRAM RAW MATERIAL	6	1	VRAJESH SHAH 9022417544
58	SUN INDUSTRIES, 1210, GIDC, SARIGAM	DISTILLATION OF PHARMA SOLVENT	PER SHIFT 8	2	SHIRISH DESAI 9825145513

59	JYOTI PLASTICS WORKS P.LTD., PARIYA ROAD, PARDI	COMPONENTS FOR MED. & PHARMA	PER SHIFT 40	2	RAMESH PATEL 9377820748
60	CALITECH LAB (NABL) ACCREDITED	CALIBRATION AND TESTING FOR PHARMACEUTICAL	PER SHIFT 10	1	PREMAL PATEL 9825041619
61	K K PACKAGING, BHILAD, TA. UMBERGAON	PACKAGING MATERIAL TO HINDUSTAN LEVER LTD.	17	1	JEEVAN DSOUSA 8007715551
62	HEXACELL PACKAGING, 779/2, 40 SHED, GIDC, VAPI	FOOD PACKING MATERIAL	10	1	NAYAN GORI 9016298018
63	GEETANJALI PACKWELL, GIDC, SARIGAM,	PACKAGING MATERIAL FOR HOSPITAL & PHARMA	16	1	KRUNAL TAYAL 8000324964
64	KAUSHAL POLYPACK, NANI TAMBADI, VAPI	PLASTIC BAGS FOR FOOD & PHARMA (D-MART, GODREJ, VIPRO)	18	1	SUMEET 98250286454
65	ENOPECK SEALS INDUSTRIES, PLOT NO. C1B/175, GIDC, PARDI	SEALS FOR MILK & PHARMA IND.	25	1	DARAJI
66	SINGH AND COMPANIES PLOT NO. 3602, PH-4, GIDC, VAPI	M S LACQUIRE & COMPOSITE DRUMS FOR AGRO CHEM	40	1	HARINDER GUPTA 9324200282
67	ELTETE INDIA TRANSPORT CO. PVT.LTD., 57/1/1, GIDC, VAPI	EDGE BOARD, PACKAGING PROFILE FOR DOMESTIC & EXPORT	12	1	VENKTESH 9824171677
68	MUNDRA INVESTMENT PVT. LTD., SHED NO. 4-5, SANJAN	HDPE/LDPE BAGS FOR FOOD PRODUCTS	PER SHIFT 22	2	SHARMA 9909033196
69	HRAKISHAN DAS MEGHJIBHAI & Co. Plot No.624-625 Priya Rd, Dungri	FABRICS FOR DEFENCE	PER SHIFT 15	2	RIKIN MEHTA 9833992291
70	M/S Trans Electro, C-1 /707/1, New GIDC ESTATE, Gundlav Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
71	M/S Trans Accessories, C-1 /707/2, New GIDC ESTATE, Gundlav Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
72	M/S BHARAT TRANSFORMERS , SHED No.2, Plot No. 189, 2nd Phase GIDC VAPI Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
73	M/S ASHISH ELECTRICALS . Plot No.61, Phase-1 Near Best Paper Mill GIDC VAPI Dist. Valsad	TRANSFORMERS REPAIR	8	-	-

74	M/S TRIBHAVAN ELECTRICALS, Plot No.61, Phase-1 Near Megma Textile GIDC VAPI Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
75	M/S SHRIDHARTI TRANSFORMERS, Plot No.318/5 D,Shed Area, Near V-Trans GIDC VAPI Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
76	NIPON ZIP INDUSTRIES PRIVATE LIMITED A-1,401/403/405, Road, No.4 GIDC Sarlgam, Ta.Umbergaon Dist. Valsad	Zipper and Silder	20	2	ASHOK CHHETRI 7574045839
77	DEEPAK CELLULOSE PVT LTD., PLOT NO. 115 & 115/1, NEW GIDC, Gundlav Valsad	Product HPMC and CAP	10	1	R.M.DURHAM 9723432407
78	RIDDIHI HEALTH CARE RK ESTATE, Nr. Chhapan Nagri Dhamdachi ,	Manufacturing of Immunity booster Drug	5	1	DHARMESH SHAH 9737301221
	SHAKTI BIO SCIENCE PVT LTD., Plot No.225/3, GIDC, VAPI VALSAD	API Inermediate	15 PER SHIFT	2	S.K.SHETTY 9820377799
80	SAMART AGRO FOODS PRODUCTS Degam Road Karvad Vapi	Floor Mill	5	-	Shahbudin Kotadia 9904027461
81	MAAN INDUSTRIES HANUMAN BHAGDA	TEA & MASALA	6	-	NIRAV DESAI 9825121872
82	RADHIKA FARSHAN GUNDLAV GIDC, Khergam Road, Valsad	All Type Namkeens	6	-	PIYUSHBHAI 9825108481
83	ALBRIGHT PACKAGING, UNIT 1 & 2, GIDC, UMBERGAON	LDPE/HDPE BAGS FOR FOOD & FERTILIZER IND.	PER PLANT 20	2	MANOJ PAREKH 9976502168



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74	M/S TRIBHAVAN ELECTRICALS, Plot No.61, Phase-1 Near Megma Textile GIDC VAPI Dist. Valsad	TRANSFORMERS REPAIR	8	-	-
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જિલ્લા મેજિસ્ટ્રેટ, વલસાડ



# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone : (079) 23226295

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Website : www.gpcb.gov.in

R.P.A.D.

**DIRECTION UNDER SECTION 31(A) OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT-1981 [HEREINAFTER REFERRED TO AS THE "AIR ACT"] AS AMENDED FROM TIME TO TIME.**

- (1) WHEREAS you are having an industrial plant for the Pharmaceuticals products manufacturing located at Plot No: 411/1, LIC Sector, GIDC Estate, Vapi-396195, Tal: Pardi, Dist: Valsad.
- (2) AND WHEREAS your industry was visited on 08.08.2020 by authorized officers of the Board, during said visit it was observed that;
  1. Fire accident occurred on dated 08/08/2020 in pharma plant of M/s. Shakti Bio Science LTD, Plot No. 411/1, LIC Sector, GIDC Estate -Vapi – 396195.
  2. During inspection strong, intense VOC is sensed in and around the factory premises due to which eye irritation is also felt.
  3. During inspection there was dense smoke emission from the pharma plant which is spreading in the prevailing wind direction (SW to NE).
  4. Analysis result of collected sample of Ambient Air Quality from down wind direction is higher than the permissible limits.
  5. Generated contaminated wastewater during fire fighting operation is going into open chamber of GIDC storm water drain outside unit premises.
  6. There was damage to ETP units and laboratory during inspection due to fire incident.
- (3) AND WHEREAS looking to the observation during the said visit you have violated provisions of the environmental laws and you are in non-compliance of the conditions granted to you.

UNDER THE CIRCUMSTANCES, I, G.B. Vasavada, Senior Scientific Officer & I/C Unit Head, Vapi of Gujarat Pollution Control Board is directed to issue the directions under Section – 31(A) of The Air (Prevention And Control Of Pollution) Act-1981 as under:-

- 1) To prohibit you from the above said manufacturing activity.
- 2) To close the operation of your industrial plant on the above mentioned premises.
- 3) To direct the concerned authority to stop supply of electricity and water with the immediate effect.
- 4) D.G. Sets and emergency facility shall be operated for safety and security purpose to maintain the temperature of specific chemicals, operation of EMS with reference to Water, Air and Hazardous waste management.
- 5) Unit shall submit Form-11 under Hazardous Waste Rules, 2016.
- 6) Unit shall comply with conditions given by DISH & Unit shall submit DISH report to Regional office Vapi & Head Office Gandhinagar.
- 7) Unit shall carry out Safety Audit/ HAZOP study if applicable.

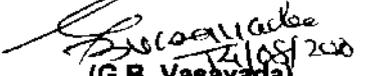
If the above directions are not complied, you are liable for prosecution under Section (37) of the Air (Prevention and Control of Pollution) Act-1981 which provides punishment with imprisonment for a term not less than one year and six months and may extend to six years and with fine.

*Clean Gujarat Green Gujarat*

ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation

This order is issued after approval of competent authority.

For and on behalf of  
GUJARAT POLLUTION CONTROL BOARD

  
(G.B. Vasavada)

Senior Scientific Officer & I/C Unit Head, Vapi

NO: GPCB/CCA-VSD-1070(4)/ID: 24371/

Date:

Issued To: -

✓ M/S. SHAKTI BIO SCIENCE LTD.  
PLOT NO. 411/1, LIC SECTOR,  
GIDC ESTATE - VAPI-396195,  
TAL: PARDI, DIST: VALSAD.

COPY TO:

1. **The Dy. Engineer (O&M)**  
Dakshin Gujarat Vij Company Ltd.,  
GIDC Sub-division, DGVCL,  
GIDC. Vapi,  
Dist: Valsad.

With a request to disconnect the supply of Electricity (except Single Phase) with the immediate effect of the industrial plant M/s. Shakti Bio Science Ltd located, at Plot No: 411/1, LIC Sector, GIDC Estate, Vapi – 396195, Tal: Pardi, Dist: Valsad and intimate to us accordingly.

2. **The Executive Engineer,**  
Vapi Notified Area, 2<sup>nd</sup> floor, G.I.D.C.,  
Administration Section, Plot No. C-1/501.  
G.I.D.C., Industrial Area,  
Killa Pardi, Dist: Valsad.

With a request to disconnect the supply of Electricity (except Single Phase) with the immediate effect of the industrial plant M/s. Shakti Bio Science Ltd, located at Plot No: 411/1, LIC Sector, GIDC Estate, Vapi – 396195, Tal: Pardi. Dist: Valsad and intimate to us accordingly.

3. **M/s. Vapi Green Enviro Limited-**  
Plot No. :EXT 1/4, Nr. Daman ganga River,  
VIA House, Plot No. 135, GIDC Vapi- 396195, Ta- Pardi, Dist,- Valsad

To disconnect the inlet effluent supply with the immediate effect of the industrial plant M/s. Shakti Bio Science Ltd, located at Plot No: 411/1, LIC Sector, GIDC Estate, Vapi – 396195, Tal: Pardi, Dist: Valsad and intimate to us accordingly.

4. **The Regional Officer,**  
G.P.C.B.-Vapi,  
Plot No. C-5/124, N.H. No.-8,  
Near Hotel Pritam, GIDC Vapi,  
Dist: Valsad.....

You are directed to verify all directions and follow with local authority for compliances of all direction in complete



# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : [www.gpcb.gov.in](http://www.gpcb.gov.in)

manner and then after please send report for further action.

For and on behalf of  
GUJARAT POLLUTION CONTROL BOARD

*G.B. Vasavada*  
(G.B. Vasavada)

Senior Scientific Officer & I/C Unit Head, Vapi

Outward No:565886,14/08/2020

*Clean Gujarat Green Gujarat*

ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation



GPCB

# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

RPAD

NO: GPCB/CCA-VSD-1070(4)/ID:24371

Date:

**Issued to: -**

M/s. Shakti Bio Science LTD.

Plot No. 411/1, LIC Sector,

GIDC Estate ,Vapi

Vapi – 396195

Dist- Valsad.

**Sub:** Levying of Interim Environmental Damage Compensation (Interim EDC).**Ref:** Direction under section 31(A) of the Air (The Air (Prevention and Control of Pollution) on

Dated: 14/08/2020 as vide letter No. GPCB/CCA-VSD-1070(4)/ID:24371/565886

Sir,

With reference to closure order issued to you vide letter No No. GPCB/CCA-VSD-1070(4)/ID:24371/565886, Date: 14/08/2020, you are hereby inform to pay **Rs. 25,00,000/-** as an interim Environment Damage Compensation (Interim EDC) through RTGS/NEFT.

RTGS details are as following:-

A	Name of Payee	GUJARAT POLLUTION CONTROL BOARD
B	Bank Account Number	10325062238
C	Type of Account	CURRENT
D	Bank	STATE BANK OF INDIA
E	Branch	GANDHINAGAR ZONAL BRANCH
F	Branch Address	SECTOR-10 /B, IN FRONT OF NEW SACHIVALAYA, GANDHINAGAR-382010
G	IFSC Code	SBIN0001355

Details regarding action taken in this regard shall be communicated on following mail especially with UTR No.

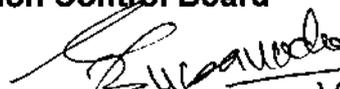
1) nuh-gpcb-acc4@gujarat.gov.in

2) nuh-gpcb- vapi@gujarat.gov.in

Therefore, you are required to submit proof of submission through RTGS /NEFT.

This order is issued after approval of competent authority.

For and on behalf of  
Gujarat Pollution Control Board



(G. B. Vasavada)

Senior Scientific Officer  
& I/C Unit Head, Vapi

*Clean Gujarat Green Gujarat*

ISO - 9001 - 2008 &amp; ISO - 14001 - 2004 Certified Organisation

	<b>DAKSHIN GUJARAT VIJ CO LTD.</b>	 18-20 Jan <b>GUJARAT 2019</b> Shaping a New India   9 <sup>th</sup> Global Summit
	<b>G.I.D.C. VAPI SUBDIVISION OFFICE.</b>	
	Near Udyognagar Post Office, VAPI 396195.	
	Ph .NO.0260-2431544	

DE/DGVCL/GIDC/VAPI/TECH/GPCB/4530

DT: 20.08.2020

To,  
 The Environmental Engineer,  
 Gujarat Pollution Control Board,  
 Paryavaran Bhavan,  
 Sector 10-A,  
 Gandhinagar-382010.

SUB- DISCONNECTION.OF H.T.POWER SUPPLY OF M/S. SHAKTI BIO SCIENCE LTD. PL-  
 NO.411/1 LIC SECTOR, GIDC VAPI.

REF: - GPCB/CCA-VSD-1070(4)/ID:24371/565886 DT: 14.08.2020.

With reference to the above subject please find enclosed here with reading of H.T Connection  
 Which is disconnected (ONE PHASE DISCONNECTED) on dated 20.08.20, Details are as under,

READING  
 KWH: 805208  
 KVArH: 196235  
 KVAH: 839586  
 BMD: 63.5 KVA

Dy. Engineer (O & M),  
 DGVCL,  
 GIDC Vapi S/Dn.

Copy Forwards to,  
 (1) The Executive Engineer,  
 DGVCL, Ind Division,  
 Balitha,  
 Vapi  
 (2) The Regional Officer  
 Gujarat Pollution Control Board  
 GIDC—VAPI

## નોટીફાઇડ એરીયા ઓફીસ,

જી.આઇ.ડી.સી.એડમીનીસ્ટ્રેટીવ ઓફીસ, બીજા માળે,  
પ્લોટ નં. સીપ/૧૦૧, ચાર રસ્તા,  
વાપી-૩૯૬૧૯૫. જિ.વલસાડ.

ફોન નં. ૨૪૨૧૫૯૬, ૨૪૩૨૬૭૦, ફેક્સ નં. ૨૪૨૦૫૦૨, ગ્રામ : નોટીફાઇડ  
E-Mail Address: [Chiefofficer.naovapi@yahoo.in](mailto:Chiefofficer.naovapi@yahoo.in)

નં. જીઆઇડીસી/ચીઓ/વાપી/ ૫૮૪૪

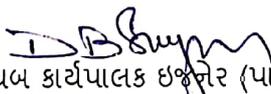
તા.૨૦/૦૮/૨૦૨૦

પ્રતિ,  
પર્યાવરણ ઇજનેરશ્રી,  
ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ,  
પર્યાવરણ ભવન,  
સેક્ટર-૧૦/એ,  
ગાંધીનગર-૩૮૨૦૧૦.

વિષય: પાણીનુ જોડાણ કાપવા બાબત.

સંદર્ભ : નં. જીપીસીબી/સીસીએ-વીએસડી-૧૦૭૦(૪)/આઈડી:૨૪૩૭૧/૫૬૫૮૮૬ તા.૧૪/૦૮/૨૦૨૦.

ઉપરોક્ત વિષય અને સંદર્ભ અન્વયે જણાવવાનુ કે, શક્તિ ઓર્ગાનિક્શ પ્રા. લિ. પ્લોટ/શેડ  
નં. ૪૧૧/૧ નુ પાણીનુ જોડાણ તા. ૨૦/૦૮/૨૦૨૦ ના રોજે કાપી નાંખવામાં આવેલ છે. જે આપની જાણ  
સારું.

  
નાયબ કાર્યપાલક ઇજનેર (પા/પ),  
નિર્દિષ્ટ વિસ્તાર, જીઆઇડીસી, વાપી.

નકલ સાદર રવાના:

- ૧). નાયબ મુખ્ય ઇજનેરશ્રી, ઉદ્યોગ ભવન, જીઆઇડીસી, ગાંધીનગર. ....જાણ સારું.
- ૨). કાર્યપાલક ઇજનેરશ્રી, (P/H), જીઆઇડીસી, ગાંધીનગર ....જાણ સારું.
- ૩). અધિક્ષક ઇજનેરશ્રી, જી.આઇ.ડી.સી. સુરત. ....જાણ સારું.
- ૪). પ્રમુખ અધિકારીશ્રી, નોટીફાઇડ એરીયા, વાપી. ....જાણ સારું.
- ૫). કાર્યપાલક ઇજનેરશ્રી, જીઆઇડીસી, વાપી. ....જાણ સારું.
- ૬). શક્તિ ઓર્ગાનિક્શ પ્રા. લિ.

પ્લોટ/શેડ નં. ૪૧૧/૧., જી.આઇ.ડી.સી. વાપી .... જાણ સારું.

<b>Directions under section 31(A) of Air Act, 1981 as vide Letter No. GPCB/CCA-VSD-1070 (4)/ID:24371/ 565886 of dated 14/08/2020</b>		
<b>Sr. No.</b>	<b>Points of Closure Directions</b>	<b>Compliance Verification</b>
<b>1</b>	Fire accident occurred on dated 08/08/2020 in pharma plant of M/s Shakti Bio Science Ltd. plot No.411/1, LIC Sector, GIDC -Vapi - 396195	During inspection unit is found not in operation. Power supply and water supply connections have been disconnected by concern authority dated 20/08/2020.
<b>2</b>	During inspectors strong, intense VOC is sensed in and around the factory premises due to which eye irritation is also felt.	
<b>3</b>	During inspection there was dense smoke emission from the pharma plant which is spreading in the prevailing wind direction (SW to NE)	
<b>4</b>	Analysis result of collected sample of Ambient Air Quality from down wind direction is higher than the permissible limits	
<b>5</b>	Generated contaminated wastewater during fire fighting operation is going into open chamber of GIDC storm water drain outside unit premises	Unit has disposed generated wastewater generated during fire fighting operation into CETP through Manifest System, which was on floor after fire. Entire quantity could not be transferred by unit as certain amount of fire fighting water went into open chamber of GIDC storm water drain during fire fighting. Manifest Copy is attached herewith.
<b>6</b>	There was damage to ETP units and Laboratory during inspection due to fire incident.	During inspection, unit is found not in operation.
<b>7</b>	To prohibit you from the above said manufacturing activity.	
<b>8</b>	To close the operation of your industrial plant on the above mentioned premises.	
<b>9</b>	To direct the concerned authority to stop supply of electricity with the immediate effect.	
<b>10</b>	D.G. sets and emergency facility shall be operated for safety and security purpose to maintain the temperature of specific chemicals, operation of EMS with reference to Water, Air and Hazardous waste management.	

<b>Sr. No.</b>	<b>Points of Closure Directions</b>	<b>Compliance Verification</b>
<b>11</b>	Unit shall submit Form-11 under Hazardous Waste Rules, 2016.	Unit has submitted Form-11 under Hazardous Waste Rules, 2016, which is attached herewith.
<b>12</b>	Unit shall comply with conditions given by DISH & unit shall submit DISH Report to Regional Office, Vapi and Head Office, Gandhinagar.	Unit has been instructed to submit DISH Remarks/ Report immediately. Unit has submitted Form-21A to DISH-Valsad, which is attached herewith.
<b>13</b>	To carry out Safety Audit/ HAZOP study if applicable.	Unit has been instructed to submit Safety Audit/ HAZOP study Report to RO- Vapi and Head office- Gandhinagar.
<b>14</b>	Unit shall pay Rs. 25/- Lakh as an Interim Environmental Damage Compensation in context with the issued Letter No. GPCB/CCA-VSD-1070(4)/ID- 24371 dated 17/08/2020.	Written Instruction given on site regarding to pay Interim EDC and unit has paid Rs. 25/- Lakh as an Interim Environmental Damage Compensation vide UTR No. BCBMH20233905743 dated 21/08/2020.

**Specific Instructions given during inspection dated 21/08/2020:**

1. You shall comply with Closure Directions issued dated 14/08/2020.
2. You shall store all your burnt material/ residue in Hazardous Waste Storage area & shall dispose in scientific manner.
3. You shall submit DISH Report/ Remarks to RO- Vapi/ Head office, Gandhinagar immediately.
4. You shall submit Safety Audit Report & HAZOP Study Report to RO- Vapi & H.O - Gandhinagar.

	DAKSHIN GUJARAT VIJ CO LTD. G.I.D.C. VAPI SUBDIVISION OFFICE.	
	Near Udyognagar Post Office, VAPI 396195.	
	Ph .NO.0260-2431544	

DE/DGVCL/GIDC/VAPI/TECH/GPCB/4530

DT: 20.08.2020

To,  
The Environmental Engineer,  
Gujarat Pollution Control Board,  
Paryavaran Bhavan,  
Sector 10-A,  
Gandhinagar-382010.

SUB- DISCONNECTION.OF H.T.POWER SUPPLY OF M/S. SHAKTI BIO SCIENCE LTD. PL-  
NO.411/1 LIC SECTOR, GIDC VAPI.

REF: - GPCB/CCA-VSD-1070(4)/ID:24371/565886 DT: 14.08.2020.

With reference to the above subject please find enclosed here with reading of H.T Connection  
Which is disconnected (ONE PHASE DISCONNECTED) on dated 20.08.20, Details are as under,

READING  
KWH: 805208  
KVAh: 196235  
KVAH: 839586  
BMD: 63.5 KVA

Dy. Engineer (O & M),  
DGVCL,  
GIDC Vapi S/Dn.

Copy Forwards to,  
(1) The Executive Engineer,  
DGVCL, Ind Division,  
Balitha,  
Vapi  
(2) The Regional Officer  
Gujarat Pollution Control Board  
GIDC—VAPI

## નોટીફાઇડ એરીયા ઓફીસ,

જી.આઇ.ડી.સી.એડમીનીસ્ટ્રેટીવ ઓફીસ, બીજા માળે,  
પ્લોટ નં. સીપ/૧૦૧, ચાર રસ્તા,  
વાપી-૩૯૬૧૯૫. જિ.વલસાડ.

ફોન નં. ૨૪૨૧૫૯૬, ૨૪૩૨૬૭૦, ફેક્સ નં. ૨૪૨૦૫૦૨, ગ્રામ : નોટીફાઇડ  
E-Mail Address: [Chiefofficer.naovapi@yahoo.in](mailto:Chiefofficer.naovapi@yahoo.in)

નં. જીઆઇડીસી/ચીઓ/વાપી/૫૮૪૪

તા.૨૦/૦૮/૨૦૨૦

પ્રતિ,  
પર્યાવરણ ઇજનેરશ્રી,  
ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ,  
પર્યાવરણ ભવન,  
સેક્ટર-૧૦/એ,  
ગાંધીનગર-૩૮૨૦૧૦.

વિષય: પાણીનું જોડાણ કાપવા બાબત.

સંદર્ભ : નં. જીપીસીબી/સીસીએ-વીએસડી-૧૦૭૦(૪)/આઈડી-૨૪૩૭૧/૫૬૫૮૮૬ તા.૧૪/૦૮/૨૦૨૦.

ઉપરોક્ત વિષય અને સંદર્ભ અન્વયે જણાવવાનું કે, શક્તિ ઓર્ગેનિક્શ પ્રા. લિ. પ્લોટ/શેડ  
નં. ૪૧૧/૧ નું પાણીનું જોડાણ તા. ૨૦/૦૮/૨૦૨૦ ના રોજે કાપી નાંખવામાં આવેલ છે. જે આપની જાણ  
સારું.

  
નાયબ કાર્યપાલક ઇજનેર (પા/પ),  
નિર્દિષ્ટ વિસ્તાર, જીઆઇડીસી, વાપી.

નકલ સાથે રવાના:

- ૧). નાયબ મુખ્ય ઇજનેરશ્રી, ઉદ્યોગ ભવન, જીઆઇડીસી, ગાંધીનગર. ....જાણ સારું.
- ૨). કાર્યપાલક ઇજનેરશ્રી, (P/M), જીઆઇડીસી, ગાંધીનગર ....જાણ સારું.
- ૩). અધિક્ષક ઇજનેરશ્રી, જી.આઇ.ડી.સી. સુરત. ....જાણ સારું.
- ૪). પ્રમુખ અધિક્ષકશ્રી, નોટીફાઇડ એરીયા, વાપી. ....જાણ સારું.
- ૫). કાર્યપાલક ઇજનેરશ્રી, જીઆઇડીસી, વાપી. ....જાણ સારું.
- ૬). શક્તિ ઓર્ગેનિક્શ પ્રા. લિ.

પ્લોટ/શેડ નં. ૪૧૧/૧., જી.આઇ.ડી.સી. વાપી .... જાણ સારું.

# HAZARDOUS WASTE MANIFEST (FORM 10)

Hazardous & other Wastes (Management and Transboundary Movement) Rules, 2016 [See Rule 19(1)]

## Industrial (W/W) Transportation to CETP

<b>01. Occupier's Name &amp; Mailing Address :</b> (Including Phone No.) <b>Shakti Bio Science Ltd</b> Plot No. 411/1 LIC Sector, Vapi S. Valsad Road GIDC Road, Vapi		<b>02. Occupier's Registration No.:</b> _____		
<b>04. Transporter's Name &amp; Address :</b> (Including Phone No.) _____ R. No. 1211		<b>03. Manifest Document No.:</b> <u>115693</u> <b>3(a) VGEL CETP Membership No.:</b> _____		
<b>05. Type of Vehicle :</b> TRUCK : _____ TANKER : _____ SPECIAL VEHICLE : _____		<b>06. Transporter's Registration No.:</b> _____ <b>07. Vehicle Registration No.:</b> <u>GP 15 AK 811</u>		
<b>08. Designated Facility (Name &amp; Site Address) :</b> <b>VAPI GREEN ENVIRO LIMITED</b> CETP SITE : Plot No. A/14, Old M. Ch. S. No. 907A & 906/P etc. G.I.D.C., VAPI 396195.		<b>09. Facility's Registration No.:</b> <b>4308</b> <b>10. Facility's Phone No.:</b> <b>(0260) 2428950</b>		
<b>11. Waste Description :</b> <b>INDUSTRIAL WASTE WATER</b>		<b>12. Total Quantity of Waste (KL) :</b> <u>10.060</u> <b>13. Consistency :</b> <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge <input type="checkbox"/> Oily <input type="checkbox"/> Tarry <input type="checkbox"/> Slurry		
<b>14. Transport Description of Waste :</b>	<b>15. Containers :</b> No. Type	<b>16. Total Quantity (MT)</b>	<b>17. Unit (Wt./Vol.) (MT)</b>	<b>18. Waste Category No.</b>
/	/	/	/	/
<b>19. Special Handling Instructions &amp; other Information :</b> <div style="text-align: right;"><b>SEE TREM CARD</b></div>				
<b>20. OCCUPIER'S CERTIFICATE :</b> I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked labeled and are in all respects in proper condition for transport by road according to applicable national government regulations. For _____ Signature: <u>[Signature]</u> Date: <u>10 AUG 2020</u>				
<b>21. Transporter's Acknowledgement of Receipt of Material (Waste Water)</b> Typed Name & Stamp: _____ Signature: <u>[Signature]</u> Date: <u>10 AUG 2020</u>				
<b>22. Discrepancy Note Space :</b>				
<b>23. Facility Owner's or Operator's Certification of receipt of Industrial Waste Water.</b> Typed Name & Stamp: _____ Signature: <u>[Signature]</u> Date: <u>10 AUG 2020</u>				

Route of Manifest - 1. White Copy - To be forwarded to the SPCB/PCC by the occupier, 2. Yellow Copy - To be signed by the transporter and retained by the occupier, 3. Pink Copy - To be retained by the transporter, 4. Orange Copy - To be returned to the transporter by the operator of facility after accepting waste, 5. Green Copy - To be forwarded to SPCB/PCC by the operator of facility after disposal, 6. Blue Copy - To be returned to the occupier by the operator of the facility after treatment & disposal.

# HAZARDOUS WASTE MANIFEST (FORM 10)

Hazardous & other Wastes (Management and Transboundary Movement) Rules, 2016 [See Rule 19(1)]

## Industrial (W/W) Transportation to CETP

01. Occupier's Name & Mailing Address : (including Phone No.)  <b>SHAKTI BIO SCIENCE LTD.</b> Plot No. 411/1, L.I.C. Sector Vapi Silvassa Road, G.I.D.C. VAPI-396 195.		02. Occupier's Registration No.: _____ 03. Manifest Document No.: <b>115720</b> 3(a) VGEL CETP Membership No.: _____		
04. Transporter's Name & Address (including Phone No.)  <b>SHAKTI BIO SCIENCE LTD.</b> Plot No. 411/1, L.I.C. Sector Vapi Silvassa Road, G.I.D.C. VAPI-396 195.	05. Type of Vehicle : TRUCK : TANKER : SPECIAL VEHICLE :	06. Transporter's Registration No.: _____ 07. Vehicle Registration No.: <b>GJ19-U-0859</b>		
08. Designated Facility (Name & Site Address):  <b>VAPI GREEN ENVIRO LIMITED</b> CETP SITE : Plot No.A/14, G.I.D.C., VAPI 396195.		09. Facility's Registration No.: <b>4308</b> 10. Facility's Phone No.: <b>(0260) 2428950</b>		
11. Waste Description :  <b>INDUSTRIAL WASTE WATER</b>		12. Total Quantity of Waste (KL) : <b>20,100 kg</b> 13. Consistency : <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge <input type="checkbox"/> Oily <input type="checkbox"/> Tarry <input type="checkbox"/> Slurry		
14. Transport Description of Waste :	15. Containers : No. Type	16. Total Quantity (MT)	17. Unit (WL/Vol.) (MT)	18. Waste Category No.
19. Special Handling Instructions & other Information :  <b>SEE TREM CARD</b>				
20. OCCUPIER'S CERTIFICATE : I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked labeled and are in all respects in proper condition for transport by road according to applicable national government regulations.				
For _____ Typed Name & Stamp		 Signature _____ Date <b>12 AUG 2020</b>		
21. Transporter's Acknowledgement of Receipt of Material (Waste Water) Typed Name & Stamp Signature _____ Date <b>12 AUG 2020</b>		22. Discrepancy Note Space		
23. Facility Owner's or Operator's Certification of receipt of Industrial Waste Water. Typed Name & Stamp Signature _____ Date <b>12 AUG 2020</b>		24. Remarks		

Routes of Manifests: 1. White Copy - To be forwarded to the SPCB/PCC by the occupier, 2. Yellow Copy - To be signed by the transporter and retained by the occupier, 3. Pink Copy - To be retained by the operator of a facility, 4. Orange Copy - To be returned to the transporter by the operator of facility after accepting waste, 5. Green Copy - To be returned to SPCB/PCC by the operator of facility after disposal, 6. Blue Copy - To be returned to the occupier by the operator of the facility after treatment or disposal of HW.



Shakti bio science ltd

Caring  
for Life

To,  
Secretary Inspector  
Vasad.

Date - 10/08/2020

Subject - Submission of Form No 21-A

Respected Sir,

With the reference of above mentioned subject,  
we Shakti Bio Science Ltd. herewith submitting  
Form No 21-A.

Kindly acknowledge the same.

Thanking You,  
For Shakti Bio Science Ltd.

Authorized Signatory  


10/8/20  
शुद्धता आणि  
साधक ज्ञानासाठी प्रवेशी  
औद्योगिक सलामती आणि स्वास्थ्य  
पल साठ.

(Prescribed under Rule 103)

Report of dangerous occurrence which does not result in bodily injury

Registration No. 296.124.299.12998

Licence No. 2744

\* NIC Code No. ....

- (As given in the licence)
1. Name and address of factory : SHAKTI Bio Science Ltd. Plot No. 411/1, LTC Sector, Vapi Silvassa Road, G.I.D.C. Vapi
  2. Name, address and telephone number of the occupier : MR. Yogesh Khedkar  
Room No. 30, Santosh Bhagar Chawl No. 1, B.R. Nagar, Dira Daxu Road, Dira - 39061
  3. Name of the Manager : MS. Sumati Soni
  4. Nature of the industry : Manufacturing Industry
  5. Department, Section and exact place where the dangerous occurrence took place : III<sup>rd</sup> Floor in Production Dept.
  6. Date, shift, and hour of dangerous occurrence : 08/08/2020, 11:30 AM  
Morning Shift
  7. (a) Type of dangerous occurrence: (See overleaf)  
(b) Did it involve Explosion  Fire   
Emission of Toxic/Flammable/Explosive substance(s)   
Substance(s) emitted
  8. State exactly what happened : Currently we assume that fire was occur due to Shortcircuit. Investigation is under process.

I certify that to the best of my knowledge and belief the above particulars are correct in every respect.

*Sumati Soni*

Signature of the Manager

Name (In block letters) MS. SUMATI SONI

Address and telephone SHAKTI BIO SCIENCE LT.  
Plot No. 411/1, L.I.C. Sector  
Vapi Silvassa Road,  
G.I.D.C. VAPI 395 195.

Date :

(To be completed by the Inspector of Factories)

1. Date or receipt of the report :
2. District :
3. (a) Number allotted to the dangerous occurrence not involving injurious and/or death  
(b) Number allotted to "Major accident" not involving reportable injuries and/or death
4. Date of investigation :
5. Cause :
6. \*NIC Code (As given in the licence) :
7. Result of investigation :



**FORM 11**  
**[See rule 22]**  
**FORMAT FOR REPORTING ACCIDENT**  
**[To be submitted by the facility or sender or receiver or transporter to**  
**the State Pollution Control Board]**

1. The date and time of the accident:

08.08.2020 at 11:30 AM

2. Sequence of events leading to accident:

Fire occurrence due to Short circuit.

3. Details of hazardous and other wastes involved in accident:

Solvents and intermediates.

4. The date for assessing the effects of the accident on health or the environment:

08.08.2020

5. The emergency measures taken:

Internal firefighting by using DCP and M.Foam type fire extinguishers and Internal Fire hydrant system and then informed to Fire department and Vapi Emergency Control Centre, Vapi.

6. The steps taken to alleviate the effects of accidents:

Internal firefighting by using DCP and M.Foam type fire extinguishers and Internal Fire hydrant system and then informed to Fire department and Vapi Emergency Control Centre, Vapi.

7. The steps taken to prevent the recurrence of such an accident:

We will do the HAZOP study for prevent recurrence.

Date:

Place:

Signature:

Designation:

