

Date: 28<sup>th</sup> May 2024

Ref: APPL / 2024 / 012

To,

Deputy Director General of Forests (Central),

West Central Zone, Regional Office,

New Secretariat Building, Opp.

VCA Ground, Civil Lines, Nagpur-440001.

Respected Sir,

**Subject: Submission of Consolidated EC compliance report for ASolution Pharmaceuticals Pvt. Ltd., for proposed project of manufacturing of active pharmaceutical ingredients, bulk drugs, intermediates, R&D and specialty chemicals at Plot no. K-3/8, MIDC Additional Ambernath, Jambivali Village, Ambernath, Dist - Thane (Consolidated Six monthly compliance report for duration of April 23 - March 24)**

Ref: Environmental Clearance letter no SEAC – 2013/CR-273/TC-2 dated 17<sup>th</sup> March 2015, granted by SEIAA, Govt of Maharashtra.

We have received the Environment Clearance from State Environment Impact Assessment Authority (SEIAA), Government of Maharashtra on 17<sup>th</sup> March 2015 for proposed project of manufacturing of active pharmaceutical ingredients, bulk drugs, intermediates, R&D and specialty chemicals.

However, we have somehow missed out to submit the compliance report to MoEFCC regional office from December 2019. Now, we are submitting the consolidated six-monthly compliance report for duration of April 2023 – March 2024 in the prescribed format. The report is giving all the details of the project along with the status of the project.

With this reference, we wish to submit the details of the project required as below:

1. Pointwise compliance report
2. Monitoring Reports

**We, regret for not to submit the six-monthly compliance reports within time. Kindly oblige us by accepting this consolidated post EC compliance report for the period of April 23- March 24. Afterwards, we will regularly submit the six-monthly compliance reports as per the requirement.**

We hope you will find same in line with your requirements.

Thanking You,

For ASolution Pharmaceuticals Pvt Ltd



Authorized Signatory

## Government of Maharashtra

SEAC-2013 / CR- 273 /TC-2  
Environment department  
Room No. 217, 2<sup>nd</sup> floor,  
Mantralaya Annex,  
Mumbai- 400 032.  
Dated: 17<sup>th</sup> March, 2015

To,  
M/s. ASolution Pharmaceuticals Pvt. Ltd.  
Plot No. K- 3/8, Additional Ambernath MIDC,  
Village Jambivali, Ambernath,  
Dist. Thane.

**Subject: Environment clearance for API (Bulk Drugs), R & D, & Analytical laboratory with pilot plant facility for bulk drugs, Herbal products, speciality chemicals organic chemicals & formulation amounting to a total of 3590 MT/ Annum at K-3/8 at additional MIDC Ambernath Thane by M/s. ASolution Pharmaceuticals Pvt Ltd.**

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification, 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 93<sup>rd</sup> meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 81<sup>st</sup> meeting.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(f) B1 as per EIA Notification 2006.

**Brief Information of the project submitted by Project Proponent is as:**

Name of project	M/s. ASolution Pharmaceuticals Pvt. Ltd. New project in manufacturing Active Pharmaceutical Ingredients, bulk drug, Intermediates, R&D Products and specialty chemicals.	
Project proponent	M/s. ASolution Pharmaceuticals Pvt. Ltd.	
Consultant	Mr. Srihari Athavale	
New project/expansion in existing	New Project	
Activity schedule in the EIA Notification	Details of use	Area in sq. meters
	Total plot area	9450
	Plant, Machinery Store room /yard, utility area (Allowable Built up area on ground)	4725
	Tank farm area	400

	Parking area	261.25
	Road area	1354
	R. G. Area (10% of total plot area)	945
	Open space	1764.75
5 (f) B1		
Area Details		
Name of the Notified Industrial Area/ MIDC area	Additional Ambernath MIDC	
TOR given by SEAC? (If yes then specify the meeting)	No. Model TOR is being followed for EIA report	
Estimated capital cost of the project (Including cost for land, building, plant and machinery separately)	Particulars	Capital cost (In Crores)
	Land	1.8
	Building/ premises	35.0
	Plant & Machinery and equipment's	30.0
	Furniture and fixtures	8.2
	Total	75.0
Location details of the project:	Latitude : 19 <sup>0</sup> 11' N Longitude : 73 <sup>0</sup> 12' E Location : Addl. MIDC, Ambernath	
Process details / manufacturing details	Please refer prefeasibility/ EIA report	
Rain water Harvesting (RWH)	RWH system will be adopted (Refer EIA)	
Total Water Requirement	Total water Requirement: Fresh water : 110.0 CMD (During Dry season) Fresh water : 105.0 CMD (During Wet season) Source : MIDC Please refer below table (During Dry Season)	
Storm water drainage	Natural water drainage pattern : Proper and separate storm water drains will be provided as per natural slope. 2 Nos. 1500 Dia. pipes with 7 nos. catchment basins in each line provided by MIDC.	
Sewage generation and treatment	Amt. of sewage generation:4 CMD Proposed treatment for the sewage: Well-designed septic tank. Overflow of the septic tank to be treated in ETP. Capacity of STP: Separate STP is not provided as sewage is treated in the ETP.	

ETP details	Amount of effluent generation (CMD): 80 CMD Capacity of the ETP: 100 CMD. Evaporator for high TDS effluent is 30 CMD (condensate to be treated in ETP). Amount of treated effluent recycled: Nil. Disposed to CETP. Membership of CETP : Yes																												
Note on ETP technology to be used	Full-fledged ETP consisting of Multiple Effect Evaporator, condensate of which is treated by Primary, secondary and Tertiary treatment.																												
Disposal of The ETP sludge	ETP Sludge shall be disposed through Common Hazardous Waste treatment storage disposal facility, Mumbai Waste Management, Taloja. (Membership No. MWML-HzW-AMB-3202)																												
Atmospheric Emissions (Flue gas characteristics SPM, SO <sub>2</sub> , NO <sub>x</sub> , CO etc.)	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Pollutant</th> <th>Source of Emission</th> <th>Emission rate</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>SPM</td> <td>Process /Boiler/ D.G. Set</td> <td>&lt;150 mg/nm<sup>3</sup></td> </tr> <tr> <td>2.</td> <td>SO<sub>2</sub></td> <td>Boiler/ D.G. Set</td> <td>&lt;67 kg/ hr.</td> </tr> <tr> <td>3.</td> <td>NO<sub>x</sub></td> <td>Boiler/ D.G. Set</td> <td>&lt;50 ppm</td> </tr> <tr> <td>4.</td> <td>Ammonia</td> <td>Process</td> <td>&lt;35 mg/nm<sup>3</sup></td> </tr> <tr> <td>5.</td> <td>HCl</td> <td>Scrubber</td> <td>&lt;50 ppm</td> </tr> </tbody> </table>					Sr. No.	Pollutant	Source of Emission	Emission rate	1.	SPM	Process /Boiler/ D.G. Set	<150 mg/nm <sup>3</sup>	2.	SO <sub>2</sub>	Boiler/ D.G. Set	<67 kg/ hr.	3.	NO <sub>x</sub>	Boiler/ D.G. Set	<50 ppm	4.	Ammonia	Process	<35 mg/nm <sup>3</sup>	5.	HCl	Scrubber	<50 ppm
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	1	Boiler	Briquette /	Briquette: 220 Tons/Month.	< 37 kg/hr									
	Total			Briquette : 220 Tons/Month										
	<p>Source of Fuel : From market/ out sider fuel companies  Mode of Transportation of fuel to site : By Road &amp; through pipeline</p> <p>Power:The total need for this Unit is 600 KVA. The required power connection is available from MSEDCL who will fulfill the need for new unit power.  During construction phase expected power requirement is 20 KW  During operation expected power requirement shall be:  For initial phase :  Connected load: 300 KVA  Max. demand : 600 KVA  Transformer capacity: 630 KVA  Sanctioned Load: 600 KVA  Total Requirement: 600 KVA</p>													
Energy	<p>Power Supply : (From MSEDCL)  Existing Power requirement : Not Applicable  Proposed power requirement:600KVA  DG sets:  Number and capacity DG sets to be used (proposed)</p> <table border="1" data-bbox="582 1211 1329 1435"> <tr> <td colspan="3">Proposed installation of D.G. Set with acoustic enclosure.</td> </tr> <tr> <td>Capacity</td> <td>Qty.</td> <td>Fuel Used</td> </tr> <tr> <td>250 KVA</td> <td>1 No.</td> <td>HSD – 60 Lit./ Hr.</td> </tr> </table> <p>Details of the non-conventional renewable energy proposed to be used:  1) Design &amp; construction of building considering maximum use of natural light and ventilation.  2) In future we are planning to use solar power for toilet and street lights.</p>					Proposed installation of D.G. Set with acoustic enclosure.			Capacity	Qty.	Fuel Used	250 KVA	1 No.	HSD – 60 Lit./ Hr.
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Green Belt Development	<p>Green belt area: 945 m<sup>2</sup>  Number of species of trees &amp; shrubs to be planted: 100 Nos.</p>													
Details of pollution control Systems:	Sr. No.	Source	Existing pollution control system	Proposed to be installed										

	1	Air	Not Applicable as our project is totally new.	By dispersal into atmosphere through chimney of adequate/ recommended height.
	2	Water		ETP will be provided to treat effluent as per MPCB standards followed by CETP
	3	Noise		DG set will be provided with acoustic enclosure to minimize noise pollution.
	4	Solid Waste		Hazardous waste will be disposed to CHWTSDF Non-hazardous solid waste will be sold to private party.
Environmental Management plan Budgetary Allocation	Capital cost of Project (with break up): Rs. 75 Crores			
	Particulars		Cost (In Crores)	
	Land		1.8	
	Building/premises		35	
	Plant, Machinery & Equipments		30	
	Furniture & Fixtures		8.2	
	Total		75	
	EMP cost (with break up): Rs. 337.0 lacs			

S. No.	Particulars	Capital cost (in lacs)	Recurring cost (in lacs/annum)
1	Air pollution control		
	Fuel burning Stack/chimneys	7.00	1.0
	Multicyclone / Dust Collector / Bag Filter	6.00	5.0
	Scrubbers	10.0	5.0
2	Water Pollution control		
	Process drains to ETP	10.0	0.1
	ETP	250.0	100.0
	RWH	5.0	0.50
	Waste minimization by effluent recycle	10.0	8.0
3	Noise pollution control		
	Acoustic encl./ Ant vibration pads	10.0	2.0
4	Env. Monitoring and management	0	5.0
5	Occupational health		
	Medical checkup	NIL	0.5
	Health insurance policy	NIL	2.5
	Medical staff charges	5.0	1.0
	First aid facilities consumables	2.0	0.50
	In-house first aid room	1.0	0.50
	Other infrastructure and Equipment	5.0	0.5
6	Green belt	6.0	2.0
7	Non-hazardous & Hazardous Waste Disposal	5.0	2.0
8	Hazardous waste storage (Fly Ash Storage)	5.0	0.50
	Total	337.0	136.6
EIA submitted ( <i>If yes then submit the salient features</i> )		Period of data collected : November 2012- January 2013 Details of the primary data collection Ambient Air samples- 9 Nos. Ground Water samples- 9 Nos. Surface Water- 3 Nos. Noise samples- 9 Nos. Soil Samples- 4 Nos.	

	Number of visits- 6 Nos.) Eco biodiversity survey – at an actual Details of secondary data collection - Source – Internet Year of data - 2012-2013 Potential hazard and mitigation measures: The proposed project would have minimal impacts without any environmental management measures. Conclusion of the EIA study : Proposed project is environmentally sound proposal not going to have any significantly adverse impact on the environment.
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3. The proposal has been considered by SEIAA in its 81<sup>st</sup> meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :


**General Conditions for Pre- construction phase:-**

- (i) This Environment clearance is issued subject to conditions that atmospheric emissions standards (flue gas) like SPM to < 130, SO<sub>2</sub> <60, NO<sub>x</sub><40 and Ammonia <35 as agreed.
- (ii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (iii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (iv) Regular monitoring of the air quality, including SPM & SO<sub>2</sub> levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (v) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.
- (vi) Proper Housekeeping programmes shall be implemented.
- (vii) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- (viii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)
- (ix) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (x) Arrangement shall be made that effluent and storm water does not get mixed.
- (xi) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- (xii) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- (xiii) The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall



- confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
- (xiv) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
  - (xv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
  - (xvi) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
  - (xvii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
  - (xviii) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
  - (xix) The company shall undertake following Waste Minimization Measures :
    - Metering of quantities of active ingredients to minimize waste.
    - Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
    - Maximizing Recoveries.
    - Use of automated material transfer system to minimize spillage.
  - (xx) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
  - (xxi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
  - (xxii) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
  - (xxiii) Separate silos will be provided for collecting and storing bottom ash and fly ash.
  - (xxiv) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department
  - (xxv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://ec.maharashtra.gov.in>
  - (xxvi) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
  - (xxvii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
  - (xxviii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely;

- SPM, RSPM. SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xxix) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (xxx) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
6. **Validity of Environment Clearance:** The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.
7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution ) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling ) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1<sup>st</sup> Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

  
(Ajoy Mehta)  
Principal Secretary,  
Environment department &  
MS, SEIAA.

Copy to:

1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune – 411014. .
3. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
6. Regional Office, MPCB, Thane.
7. Collector, Thane
8. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
9. Select file (TC-3)

(EC uploaded on 19/3/15 )

## **A. Current Status of Project**

### **1. Current status of project:**

We have received the consent to operate on 04.01.2020 For 3590 TPA quantity and valid up to 31.10.2024 The existing CTO is attached.

Environment monitoring at project site is carried out as per schedule and results are attached as **Annexure- I**

**B. Point by Point comment on Environment Clearance letter**

Sr No	Terms and conditions in EC	Compliance
i	This environmental clearance is issued subject to conditions that atmospheric emissions standards (flue gas) like SPM to < 130, SO <sub>2</sub> < 60, NO <sub>x</sub> < 40 and ammonia < 35 as agreed.	All atmospheric emission standards of flue gas like SPM, SO <sub>2</sub> , NO <sub>x</sub> and Ammonia is being followed during operation. The stack was monitored was the following pollutants and the results are mentioned here under: SPM: 78.74 mg/Nm <sup>3</sup> SO <sub>2</sub> : 90.48 Kg/Day NO <sub>x</sub> : 2.85 mg/Nm <sup>3</sup>
ii	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	No additional land is used for any activity of the project.
iii	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	The said dust emission controls were followed during construction & production activity.
iv	Regular monitoring of the air quality, including SPM & SO <sub>2</sub> levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	Ambient Air monitoring was done regularly at our manufacturing unit. The frequency has been decided in consultation with MPCB officials. Monitoring reports of are attached as <b>Annexure II.</b> PM 10: 65.99 µg/m <sup>3</sup> PM 2.5: 34.46 µg/m <sup>3</sup> SO <sub>2</sub> : 15.41 µg/m <sup>3</sup> NO <sub>x</sub> : 15.77 µg/m <sup>3</sup> CO: <1.0 mg/m <sup>3</sup>
v	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	All Necessary arrangement for adequate safety and ventilation are already in place i.e., Fire Hydrant, Hose reel, Fire siren, Smoke detectors, etc. The inspection report of the fire prevention and life safety measures installed is enclosed as <b>Annexure-III</b>
vi	Proper Housekeeping programs shall be	Housekeeping program is implemented

	implemented.	regularly, record of housekeeping is attached for the month of February 2023 is enclosed as an <b>Annexure IV</b> .															
vii	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Yes, agreed & noted.															
viii	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable)	A stack of adequate height based on DG set capacity is provided for control and dispersion of pollutant from DG set.															
ix	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	Rainwater harvesting system implemented at project site & tank of 1 Lac lit is installed. Collected water is used for Utility purposes.															
x	Arrangement shall be made that effluent and storm water does not get mixed.	We have made proper arrangement so that effluent & storm water does not get mixed. Separate drains for the effluent and the stormwater have been provided.															
xi	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.	Not applicable as source of water is MIDC.															
xii	Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. Shall be provided.	<p>Noise levels are maintained as per standards by implementing various control measures. Proper PPE are provided for people working in high noise areas.</p> <p>Noise Monitoring has been regularly done and reports area attached as an <b>Annexure- II</b></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day Db(A) Leq</th> <th>Night Db(A) Leq</th> </tr> </thead> <tbody> <tr> <td>Near Main Gate</td> <td>57.9</td> <td>52.1</td> </tr> <tr> <td>Near Utility</td> <td>62.7</td> <td>56.2</td> </tr> <tr> <td>API Plant</td> <td>62.9</td> <td>57.7</td> </tr> <tr> <td>M.P.C.B. Limit</td> <td>75.0</td> <td>70.0</td> </tr> </tbody> </table>	Location	Day Db(A) Leq	Night Db(A) Leq	Near Main Gate	57.9	52.1	Near Utility	62.7	56.2	API Plant	62.9	57.7	M.P.C.B. Limit	75.0	70.0
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M.P.C.B. Limit	75.0	70.0															
xiii	The overall noise levels in and around the plant shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods. Silencers, enclosures, etc. On all sources of noise generation. The ambient noise levels shall	<p>Noise levels in and around the plant are within the standards for industrial land use as per CPCB.</p> <p>Noise Monitoring has been regularly done and reports area attached as an</p>															

	confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.	<p><b>Annexure- I.</b> All reports are well within standards prescribed by MPCB.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day Db(A) Leq</th> <th>Night Db(A) Leq</th> </tr> </thead> <tbody> <tr> <td>Near Main Gate</td> <td>57.7</td> <td>52.1</td> </tr> <tr> <td>Near Utility</td> <td>62.7</td> <td>56.2</td> </tr> <tr> <td>API Plant</td> <td>62.9</td> <td>57.7</td> </tr> <tr> <td>M.P.C.B. Limit</td> <td>75.0</td> <td>70.0</td> </tr> </tbody> </table>	Location	Day Db(A) Leq	Night Db(A) Leq	Near Main Gate	57.7	52.1	Near Utility	62.7	56.2	API Plant	62.9	57.7	M.P.C.B. Limit	75.0	70.0
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xiv	A green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Dept.	The Green belt is well developed and maintained on 945 Sq m area. A total of 100 trees have been planted in the green belt. Photograph of the same is enclosed as <b>Annexure V.</b>															
xv	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	The company has full-fledged safety and fire department with implementation & monitoring of adequate safety measures. Risk Analysis, On - Site Emergency plan is prepared and regularly updated. A leak detection system is installed at strategic places. <b>Onsite emergency plan is attached as Annexure VI</b>															
xvi	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.	Regularly Done. Form 7 is attached as <b>Annexure VII.</b> Frequency of health checkup is every 6 months															
xvii	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	Firefighting system is already available at the project site. Inspection report for Fire safety measures has been enclosed as <b>Annexure-III.</b>															
xviii	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.	The company is strictly complying with the rules and regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. We have already taken permission from CHWTSDF (Membership No. MWML-HZW-AMB-3202 valid up to 31 <sup>st</sup> March 2024). Annual returns in Form- 4 as required is regularly submitted to MPCB. Consent to Establish obtained which includes HW management conditions. <b>Form 4 submitted on 13.05.2024 for the year 2024 is attached as annexure VIII and</b>															

		<b>CHWTSDF certificate is attached as Annexure IX.</b>
xix	The company shall undertake following Waste Minimization Measures: a) Metering of quantities of active ingredients to minimize waste. b) Reuse of by – products from the process as raw materials or as raw material substitutes in other process. c) Maximizing Recoveries. d) Use of automated material transfer system to minimize spillage.	Followed as per the requirement: (a) All raw materials are metered and controlled for their quantities to minimize waste. (b) There are no by-products being generated from the process. (c) Recovered solvents are reused in processes. (d) Pumps are used to transfer liquids in closed pipelines.
xx	Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required. If any, in the on-site management plan shall be ensured.	Mock drill is being carried out on a regular basis. The Mock drill report is enclosed as an <b>Annexure X</b> .
xxi	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	We have separate environment management cell for implementation of the stipulated environmental safeguards. And same is attached as <b>Annexure XI</b> .
xxii	Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.	Transportation of ash is carried out through closed containers and all measures are regularly taken to prevent spilling of the ash.
xxiii	Separate silos will be provided for collecting and storing bottom ash and fly ash.	Proper arrangement is provided for collection & storage of bottom ash and fly ash.
xxiv	Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item-wise breaks-up. This cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	EMP cost for the year 2022-2023: Rs. 1.2 Cr
xxv	The project management shall advertise at least in two local newspapers widely circulated In the region around the project. One of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the	The advertisement of the obtained Environmental clearance was published in the newspapers, Maharashtra Times & Times of India dated 04 <sup>th</sup> April 2015 and is enclosed as <b>Annexure XII</b> .



	Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://envis/maharashtra.gov.in">http://envis/maharashtra.gov.in</a> .	
xxvi	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1 <sup>st</sup> June & 1 <sup>st</sup> December of each calendar year.	Noted & being done.
xxvii	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Noted & Agreed We have not received any suggestions and representations while processing the proposals from concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban local and the local NGO. Hence this clearance copy not given to them but informed in the various meetings.
xxviii	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB and the SPCB. The criteria pollutants levels namely; SPM, RSPM, SO2 NOx (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Yes. Screenshot of website showing uploading of EC letter, EC Compliance and Monitoring data is attached as <b>Annexure XIII</b> . The weblink for the EC letter uploaded on the website is as under:  <a href="https://www.asolution.in/files/ugd/5b2ac8_a9cb91ca34a8443497baf14bdcd17397.pdf">https://www.asolution.in/files/ugd/5b2ac8_a9cb91ca34a8443497baf14bdcd17397.pdf</a>
xxix	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Noted & being done.
xxx	The environmental statement for each financial year ending 31 <sup>st</sup> March in form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986., as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Latest form V which is submitted on 16.08.2023 for the year ending 31 <sup>st</sup> march 2023 is enclosed as <b>Annexure XIV</b> .

## List of Annexures

<b>Annexure No.</b>	<b>Title of Annexure</b>
1.	Consent to Operate
2.	Analysis Reports
3.	Inspection Report of Fire Safety
4.	Housekeeping Records
5.	Green Belt Photo
6.	Onsite Emergency Plan
7.	Form 7
8.	Form 4
9.	CHWTSDF Report
10.	Mock Drill Report
11.	Environment Management cell
12.	Newspaper advertisement
13.	Screenshot of EC on website
14.	Form-V Environmental Statement

**Annexure-I**  
**Consent to Operate**

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
Fax: 24023516  
Website: <http://mpcb.gov.in>  
Email: [cac-cell@mpcb.gov.in](mailto:cac-cell@mpcb.gov.in)



Kalpataru Point, 2nd and  
4th floor, Opp. Cine Planet  
Cinema, Near Sion Circle,  
Sion (E), Mumbai-400022

RED/L.S.I

No:- Format1.0/CC/UAN No.0000058051/CO - 200/000219

Date: 04/01/2020

To,  
M/s. ASolution Pharmaceuticals Private Limited  
Plot No.-K-3/8, Additional Anandnagar MIDC  
Next to MSETCL Power Substation, Thakurpada  
Ambarnath (East) Dist- Thane- 421506

**Sub: Grant of 1st Consent to Operate (Expansion) with amalgamation of existing consent to operate under Red/LSI category**

- Ref:**
1. Consent to Operate accorded by Board vide No. MPCB/17/1702000758/78 dtd 15.02.2017
  2. Consent to Establish accorded by Board vide No. Format 1.0/AST/UAN No. 0000031847/E/CC-1806000327 dtd 07.06.2018
  3. Environment Clearance accorded by Env. Dept GoM vide No. SEAC-2013/CR-273/TC-2 dtd 17.03.2015
  4. Consent Committee Meeting held on 26/11/2019

Your application No.MPCB-CONSENT-0000058051 Dated 07.10.2018

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to operate is granted for a period up to 31/10/2024**
2. **The capital investment of the project is Rs.72 Crs. (As per C.A Certificate submitted by industry Existing-Rs. 4.95 Crs + Expansion/Increase in C.I. - Rs. 67.05 Crs)**
3. **Consent is valid for the manufacture of:**

Sr No	Product/Co-Product Name	Maximum Quantity	UOM
1	Anti-diabetic-Glimepiride - API and its intermediates/Metformin hydrochloride - API and its intermediates/Glipizide	2833.00	MT/A
2	Anti-migrane-Zoledronic Acid - API and its intermediates/Frovatriptan-API and its intermediates/Eletriptan	18.00	MT/A

3	Anti-hypertensive-Irbesartan PH.EUR/USP-API and its intermediates/Trandolapril - API and its intermediates/Isradipine/Olmesartan-API and its intermediates/Telmisartan API and its intermediates/Valsartan-API and its intermediates	27.00	MT/A
4	Aromatase inhibitor-Letrozole - API and its intermediates/Propofol - API and its intermediates	7.00	MT/A
5	Bipolar Disorder-Valproic acid-API and its intermediates /Sodium valproate-API and its intermediates /Divalproes sodium-API and its intermediates/ Aripiprazole-API and its intermediates	64.00	MT/A
6	Glaucoma-Bimatoprost-API and its intermediates /Latanoprost-API and its intermediates /Travoprost-API and its intermediates /Brimonidine-API and its intermediates /Betaxolol-API and its intermediates /Pilocarpine-API and its intermediates	36.00	MT/A
7	Polysomnography drug-Ezopiclone	6.00	MT/A
8	Muscle relaxant-Tizanidine HCl	6.00	MT/A
9	Non-benzodiazepine hypnotic-Zopiclone	6.00	MT/A
10	Anticonvulsants-Lamotrigine	6.00	MT/A
11	SERM-Lasofoxifene	6.00	MT/A
12	Anti-hypertensive-Lercandipine HCl	6.00	MT/A
13	Anti-viral-Acyclovirs	6.00	MT/A
14	Leukotriene receptor antagonist-Montelukast Na	6.00	MT/A
15	Gastroprokinetic agent-Mosapride	6.00	MT/A
16	Proton pump inhibitor-Pantoprazole sodium	6.00	MT/A
17	ACE inhibitor-Ramipril	6.00	MT/A
18	NSAID-s + Ibuprofen	6.00	MT/A
19	PDE5 inhibitor-Tadalafil	6.00	MT/A
20	Thyroid-Nitisinone-API and its intermediates	2.00	MT/A
21	Cytoprotective agent-Amifostine	6.00	MT/A
22	Stimulant-Armodafinil	6.00	MT/A
23	Anti-infective-Atovaquone	6.00	MT/A
24	BPH agents-Finasteride	6.00	MT/A
25	Eugeroic-Modafinil	6.00	MT/A

26	Calcitrol-Falecalcitriol-API and its intermediates	10.00	MT/A
27	Epileptic-Pregabalin-API and its intermediates	10.00	MT/A
28	Erectile dysfunction-Alprostadil-API and its intermediates	5.00	MT/A
29	Fungal-Voriconazole-API and its intermediates	10.00	MT/A
30	Hyperuricemia-Allopurinol-API and its intermediates	60.00	MT/A
31	Parkinson-Cabergoline-API and its intermediates	5.00	MT/A
32	Low density-Colesevelam-API and its intermediates	5.00	MT/A
33	Anti-bacterial-Nitrofurantoin-API and its intermediates/ Moxifloxacin	66.00	MT/A
34	Anesthetic-Prilocaine-API and its intermediates	5.00	MT/A
35	ANSAJ-Nabumetone -API and its intermediates	80.00	MT/A
36	ARMD-Anecortaque acetate	10.00	MT/A
37	ADHD-Dexmethylphenedate-API and its intermediates	2.00	MT/A
38	Anti-Asthmatics-Formoterol	6.00	MT/A
39	Anti-convulsants-Fosphenytoin sodium/ Levetiracetam /Zonisamide	18.00	MT/A
40	Cholesterol-Rosuvastatin calcium/Fluvastatine	12.00	MT/A
41	Anti-psychotic-Ziprasidone-API and its intermediates/ Risperidone/ Olanzapine	17.00	MT/A
42	NRTI-Zidovudine /Lamivudine	12.00	MT/A
43	For chronic renal failure -Sevelamer carbonate-API and its intermediates	5.00	MT/A
44	Urinary inconsistency-Solifenacin-API and its intermediates /Darifenacin-API and its intermediates /Oxybutynin	12.00	MT/A
45	Anti-Depressant-Escitalopram oxalate/ Paroxetine HCl/ Imipramine HCl/ Sertraline/ Venlafaxine	30.00	MT/A
46	Psychotherapeutics-Bupropion HCl/ Duloxetine	12.00	MT/A
47	Irritable bowel-Tegaserod-API and its intermediates/ Lubiprostone	10.00	MT/A
48	Anti-histamine-Cetirizine DI-HCL-API and its intermediates	25.00	MT/A
49	Bronchodilator-Erdosterine-API and its intermediates	5.00	MT/A
50	Anti-Dyskinetic-Ropinirole hydrochloride	5.00	MT/A
51	Anti-platelet-Clopidogrel bisulphate USP-API and its intermediates	10.00	MT/A
52	Anti-acne-Imiquimod-API and its intermediates /Ensulizole-API and its intermediates	15.00	MT/A
53	Ophthalmic-Atropine-API and its intermediates /Cyclopentolate-API and its intermediates /Carbachol-API and its intermediates /Acitazanolast-API and its intermediates	19.00	MT/A
54	Obesity-Rimonabant-API and its intermediates /Contrave-API and its intermediates	4.00	MT/A
55	Tuberculosis-Rifabutin-API and its intermediates /Simvastatin-API and its intermediates /Rifapentine-API and its intermediates	10.00	MT/A



4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	80	As per Schedule -I	Recycle 100% to achieve ZLD
2.	Domestic effluent	4	As per Schedule - I	Soaked in soak pit

5. Conditions under Air (P & CP) Act, 1981 for air emissions:

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	1	Boiler	1	As per Schedule -II
2	2	Scrubber-1 (Absorber)	1	As per Schedule -II
3	3	Scrubber-2 (HCL)	1	As per Schedule -II
4	4	DG Set 250 KVA	1	As per Schedule -II

6. Non-Hazardous Wastes:

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Bio degradable Waste-Domestic- (Sanitary Waste)	2.5	MT/M	Nil	Local Body
2	Waste papers	0.5	MT/M	Nil	Sale
3	Non-Bio degradable Waste-1) Plastic Bags-	0.10	MT/M	Nil	Sale
4	Waste Material Scrap	0.20	MT/M	Nil	Sale
5	Waste decontamination Plastic cans	0.10	MT/M	Nil	Sale

7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	28.1 Process Residue and wastes	10	MT/M	Incineration	CHWTSDF
2	28.4 Off specification products	0.5	MT/M	Incineration	CHWTSDF
3	28.6 Spent solvents	20	MT/M	Recycle	Sale to authorized reprocessor having permission under Rule 9 of HW Rule
4	35.3 Chemical sludge from waste water treatment	2.5	MT/M	Landfill	CHWTSDF
5	37.3 Concentration or evaporation residues	210	MT/M	Incineration	CHWTSDF
6	35.3 Chemical sludge from waste water treatment	4.7	MT/M	Landfill	CHWTSDF (Bio sludge)

7	28.2 Spent catalyst	4.5	MT/M	Incineration	CHWTSDf
8	28.5 Date-expired products	0.5	MT/M	Incineration	CHWTSDf
9	35.3 Chemical sludge from waste water treatment	2.5	MT/M	Landfill	CHWTSDf

- 8 The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- 9 This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 10 This consent is issued with overriding effect on earlier Consent to Operate granted by the Board vide no. Consent No. MPCB/17/1702000758/78 dtd 15.02.2017
- 11 This consent is issued pursuant to the decision of the 8th Consent Committee Meeting held on 26/11/2019
- 12 The applicant shall comply with the conditions of the Environmental Clearance granted vide letter No. SEAC-2013/CR-273/TC-2 dtd 17.03.2015
- 13 Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .
- 14 The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.

For and on behalf of the  
Maharashtra Pollution Control Board.

(E. Ravendran IAS),  
Member Secretary

**Received Consent fee of -**

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	100000.00	7613185	12/10/2018	NEFT
2	400000.00	5457717	06/12/2019	RTGS

**Copy to:**

1. Regional Officer, MPCB, Kalyan and Sub-Regional Officer, MPCB, Kalyan II  
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Sion, Mumbai



### SCHEDULE-I

#### **Terms & conditions for compliance of Water Pollution Control:**

1. A) As per your application, you have provided Effluent Treatment Plant (ETP) of designed capacity of 100.00 CMD consisting of Primary (Collection tank, Neutralization tank, Flash mixer, Primary Clarifier/Primary Settling Tank), Secondary (Activated sludge process), Tertiary (Pressure sand filter, Activated carbon filter), Advanced treatment (Reverse osmosis) .  
B) The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent and recycle the entire treated effluent into the process for various purposes such as for cooling, process & Scrubbing so as to achieve Zero Liquid Discharge. There shall be no discharge on land or outside factory premises generated from this unit.
2. A) As per your application, you have provided Septic Tank followed by Soak pit for the treatment of 4 CMD of sewage.

**B) The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.**

1	BOD (3 days 27oC )	Not to exceed	100 mg/L
1	Suspended Solids	Not to exceed	100 mg/L

- C) The treated sewage shall be discharged on land for gardening within premise.
3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
  4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
  5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

<b>Sr. No.</b>	<b>Purpose for water consumed</b>	<b>Water consumption quantity (CMD)</b>
1.	Industrial Cooling, spraying in mine pits or boiler feed	96.00
2.	Domestic purpose	5.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	30.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	5

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

**SCHEDULE-II****Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S%	SO <sub>2</sub>
1	Boiler	Multi cyclone Dust Collector	30.5	Briquette	210 MT/M	--	--
2	Scrubber-1 (Absorber)	HCL Water Scrubber	1.5	--	--	--	--
3	Scrubber-2 (HCL)	HCL Water Scrubber	1.5	--	--	--	--
4	DG Set (250 KVA)	Acoustic Enclosure	3.2	HSD	60 Ltr/Hr	1.80	37.30

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Total Particulate matter	Not to exceed	150 mg/Nm <sup>3</sup>
Acid Mist	Not to exceed	35 mg/Nm <sup>3</sup>

4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



**SCHEDULE-III**  
**Details of Bank Guarantees:**

Sr. No.	Consent(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to E	5.0 Lakh	Existing (To be extended)	Towards compliance of consent conditions	31/10/2024	28/2/2025

\*\* The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent.  
# Existing BG obtained for above purpose if any may be extended for period of validity as above.

**BG Forfeiture History**

Srno.	Consent (C2E/C2O/C2R)	Amount of BG Imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
1	NA					

**BG Return details**

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
				NA



**SCHEDULE-IV**  
**General Conditions:**

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.



12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
13. The PP shall provide personal protection equipment as per norms of Factory Act
14. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website ([www.mpcb.gov.in](http://www.mpcb.gov.in)).
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. 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 standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.



26. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
34. The applicant shall make an application for renewal of the consent at least 60 days before the date of expiry of the consent.





**Annexure-II**  
**Monitoring Reports**



**QF/LA/09**

Report Ref. No. : GFLW/R/24/04/06

Report Date: 08.04.2024

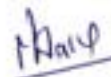
**Analysis Test Report**

Name & Address of the Client :	M/s. A Solution Pharmaceuticals Pvt. Ltd, Plot no K-3/8 Additional Ambarnath MIDC, Next to MSETCL Power Substation, Thakurpada Ambarnath 421 506 Dist. Thane		
Date of Sampling :	02.04.2024	Sample Description :	1. ETP Inlet 2. ETP Outlet
Date of Receipt of Sample :	03.04.2024	Sample Quantity :	2000 ml
Date of Analysis Started :	03.04.2024	Sample Collected by :	Laboratory
Date of Analysis Completed :	08.04.2024	Sample Container :	Plastic Carboy
Sampling Plan :	QF/LA/01-B 30.03.2024	Sampling Location :	ETP Plant
Sampling Method :	APHA 1060B 24 <sup>th</sup> Edition		

Sr. No.	Parameters	Unit	Sample Code		Limit as per MPCB Consent	Test Method Used
			GFLW/24/04/06	GFLW/24/04/07		
1.	pH	--	6.39	6.79	Not Specified	APHA 4500-H+B(24 <sup>th</sup> Edition)
2.	Chemical Oxygen Demand	mg/l	784	10	Not Specified	APHA 5220 B(24 <sup>th</sup> Edition)
3.	Biological Oxygen Demand (3 days @ 27°C )	mg/l	204	<5	Less than 100	IS 3025(Part 44) :2019
4.	Total Suspended Solids	mg/l	10	6	Less than 100	APHA 2540 D (24 <sup>th</sup> Edition)
5.	Total Dissolved Solids	mg/l	152	78	Not Specified	APHA 2540 C (24 <sup>th</sup> Edition)
6.	Oil & Grease	mg/l	<5	<5	Not Specified	APHA 5520 B (24 <sup>th</sup> Edition)

-----End of Report -----

For Goldfinch Laboratory

Authorized by  
Tanuja Thakur (Technical Manager)

Page 1 of 1

**NABL Accreditation in Process**

**Note :** 1. Test results related only to the sample(s) tested. 2. This Certificate may not be reproduced in full or part, without the permission of this Laboratory. 3. Samples will be retained by us for a period of fifteen days only, unless specific instructions are given by the client. 4. Goldfinch Lab is not responsible for the authenticity of photocopies or computer scanned reports / certificates.

**QF/LA/10-A****Report Ref. No.: GFL/AA/R/24/04-07****Report Date: 12.04.2024****Analysis Test Reports for Ambient Air Monitoring**

<b>Name of the Industry:</b>	<b>M/s Asolution Pharmaceuticals Pvt Ltd. Ambernath.</b>		
<b>Date of Sampling:</b>	02.04.2024	<b>Sample Description:</b>	Ambient
<b>Date of Receipt of Sample:</b>	03.04.2024	<b>Sample Collected by:</b>	Laboratory
<b>Date of Analysis Started:</b>	04.04.2024	<b>Date of Analysis Completed:</b>	12.04.2024
<b>Sampling Plan:</b>	QF/LA/01 B – 30.03.2024	<b>Sampling Location:</b>	Near Main Gate
<b>Sampling Method:</b>	Refer test method		

Sample Code No.	GFL/AA/24/04-07	Limits	Units	Test Method
<b>Location</b>	<b>Near Main Gate</b>			
<b>Date/Duration</b>	02.04.2024 1 hr. (CO, O <sub>3</sub> , Benzene & NH <sub>3</sub> ) & 8 hrs (Rest of the pollutants)			
<b>PM 10</b>	65.99	100	µg/m <sup>3</sup>	CPCB Guidelines for Measurement of Ambient Air Pollutants (NAAQS Volume-I)
<b>PM 2.5</b>	34.46	60	µg/m <sup>3</sup>	IS 5182 (Part-24):2019
<b>SO<sub>2</sub> conc.</b>	15.41	80	µg/m <sup>3</sup>	IS 5182 (Part-2/Sec 1):2023
<b>NO<sub>x</sub> conc.</b>	15.77	80	µg/m <sup>3</sup>	IS 5182 (Part-6):2006, Reaffirmed-2022
<b>Ammonia</b>	58.25	400	µg/m <sup>3</sup>	IS 5182 (Part-25):2018, Reaffirmed-2023
<b>Carbon Monoxide</b>	<1.0	04	mg/m <sup>3</sup>	IS 5182 (Part-10):1999, Reaffirmed-2019
<b>Benzene</b>	1.93	05	µg/m <sup>3</sup>	GFL/SOP/GCMS-03
<b>Ozone</b>	<39.0	180	µg/m <sup>3</sup>	CPCB Guidelines for Measurement of Ambient Air Pollutants (NAAQS Volume-I)
<b>Lead</b>	0.10	01	µg/m <sup>3</sup>	CPCB Guidelines for Measurement of Ambient Air Pollutants (NAAQS Volume-I), AAS Method
<b>Nickel</b>	5.30	20	ng/m <sup>3</sup>	
<b>Arsenic</b>	0.22	06	ng/m <sup>3</sup>	
<b>Benzo(a)pyrene</b>	<0.1	01	ng/m <sup>3</sup>	IS 5182 (Part-12):2004, Reaffirmed-2019, & CPCB NAAQS Volume-I
Sampling carried out using HVS GOLDFINCH/INST-HVS/02 Calibrated on: 13.09.2023 Calibration Due on: 13.09.2024			Sampling carried out using ADS GOLDFINCH/INST-ADS/70 Calibrated on: 13.09.2023 Calibration Due on: 13.09.2024	

----- End of Report -----

For Goldfinch Laboratory

*U Kelkar*Authorized by  
**Ulka Kelkar (Technical Manager)**

Page 1 of 1

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QF/LA/10-B

Report Ref. No.: GFL/AS/R/24/04-08

Report Date: 12.04.2024

**Analysis Test Report for Stack Emissions Monitoring**

Name of the Industry:	M/s Asolution Pharmaceuticals Pvt Ltd. Ambernath		
Date of Sampling:	02.04.2024	Sample Description:	Stack
Date of Receipt of Sample:	03.04.2024	Sample Collected by:	Laboratory
Date of Analysis Started:	04.04.2024	Date of Analysis Completed:	12.04.2024
Sampling Plan:	QF/LA/01 B – 30.03.2024	Sampling Location:	Boiler Stack
Sampling Method:	Refer test method		

Sample Code No.	GFL/AS/24/04-08	Limits	Units	Test Method
Stack Attached To	Boiler Stack			CPCB Guidelines on Methodologies for Source Emission Monitoring
Stack Diameter	0.8		meter	
Stack Height	30.5		meter	
Fuel used	Briquette 1.5		T/day	
Velocity of flue gases	4.58		m/s	
Temperature of flue Gases	118		°C	
Flow/volume of flue Gases	8298.6		m <sup>3</sup> /Hr	
Particulate Matter	78.74	150	mg/Nm <sup>3</sup>	CPCB Guidelines on Methodologies for Source Emission Monitoring
Sulphur Di Oxide Content	90.48	--	Kg/Day	IS:11255 (Part 2):1985, Reaffirmed 2019
Nox Conc.	2.85	--	mg/Nm <sup>3</sup>	IS 11255 (Part 7):2005, Reaffirmed 2022
Sampling carried out using Stack Monitoring Kit ID No. GOLDFINCH/INST-STACK/97 Calibrated on- 12.08.2023 Calibration due on- 12.08.2024				

----- End of Report -----

For Goldfinch Laboratory

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Ulka Kelkar (Technical Manager)

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QF/LA/10-C

Report Ref. No.: GFL/AN/R/24/04-09 TO 11

Report Date: 12.04.2024

**Analysis Test Report for Ambient Noise Level Survey**

Name of the Industry:	M/s Asolution Pharmaceuticals Pvt Ltd. Ambernath		
Date of Sampling:	02.04.2024	Sample Description:	Noise
Date of Receipt of Sample:	03.04.2024	Sample Collected by:	Laboratory
Date of Analysis Started:	11.04.2024	Date of Analysis Completed:	11.04.2024
Sampling Plan:	QF/LA/01 B - 30.03.2024	Sampling Location:	As mentioned below
Sampling Method:	Refer test method		

Sample Code No.-	Location	Ambient Noise Level		Test Method Used
		Day dB(A) Leq	Night dB(A) Leq	
GFL/AN/24/04-09	Near Main Gate	57.9	52.1	IS 9989-1981, Reaffirmed 2023
GFL/AN/24/04-10	Near Utility Plant	62.7	56.2	
GFL/AN/24/04-11	Near API Plant	62.9	57.7	
	M.P.C.B. Limit	75.0	70.0	

Survey carried out using dB meter  
Sr. No. GOLDFINCH/INST-DB METER/124  
Calibrated On: 18.03.2024  
Calibration due: 17.03.2025

----- End of Report -----

For Goldfinch Laboratory

Authorized by  
Ulka Kelkar (Technical Manager)

## **Annexure-III**

# **Inspection report of fire safety measures**



# MANOJ FIRE & SAFETY SERVICE

Licensed Fire Agency Approved By

The Directorate Of Maharashtra Fire Services, Govt. Of Maharashtra

Admn. Office : 1/4, Venkatesh Niwas,  
Near Narayan Nagar, L. B. S. Marg,  
Ghatkopar (W), Mumbai - 400 086.  
Tel.: (022) 2502 8031 • Cell : 9821830649

Branch Office : Gala No. 5 & 6,  
Ground Floor, Sanjivani Lifestyle,  
Bhuvaneshwar, Varse, Tal. Roha,  
Dist. Raigad - 402116.

E-mail : manojfire91@yahoo.com

Ref : MFSS/ASPPL-06/2023-24

## FORM B

Certified that We have Carried out Inspection of The Fire Prevention and Life Safety Measures

Installed in the Following Building or Premises, Namely :-

### A SOLUTION PHARMACEUTICALS PVT LTD

K-3/8 Additional Ambernath MIDC,  
Next to MSETCL Power Substation,  
Thakurpada, Ambernath (E) 421 506,  
Dist. Thane, Maharashtra, India.

We have Further Certify that these Installations in the above mentioned buildings are maintained in good repair and efficient conditions during the period July 2023 to Dec 2023 as required under the provisions of the Maharashtra Fire Prevention and Life Safety Measure Act, 2006 ( Mah.III of 2007 ). The details of the Inspection of Installations Carried out by us are Mentioned in the report appended herewith.

Place : Mumbai

Date : 06.01.2024

License No.:

- 1) Maharashtra Fire Services License No : MFS / LA / RF-317 Dtd : 10.06.2023
- 2) Maharashtra Fire Services License No : MFS / LA / RD-297 Dtd : 10.06.2023

Signature and address of the Licensed Agency  
FOR MANOJ FIRE & SAFETY SERVICE



Archana  
Ashok  
Sawant

Digitally signed  
by Archana  
Ashok Sawant  
Date: 2024.01.06  
20:29:34 +05'30'

**Annexure-IV**  
**Housekeeping Records**



Annexure # 01

RECORD OF CLEANING AND HOUSEKEEPING ON THE PRODUCTION SHOP FLOOR

003

Floor: 2nd floor

Month and Year: May-2023

Frequency	Date	1	2	3	4	5	6	7	8	9	10
Once in every shift	Floor cleaning	Disinfectant	Dettol	Dettol	Dettol	Dettol	Dettol	Dettol	Dettol	Dettol	Dettol
	1 <sup>st</sup> Shift		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Checked by		NP	NP	NP	SN-	SN-	SN-	SN-	BP	SN-
	2 <sup>nd</sup> Shift <sup>s</sup>		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Checked by		SN-	SN-	Byoph	Byoph	Byoph	Byoph	Byoph	Byoph	BP
	3 <sup>rd</sup> Shift <sup>s</sup>		✓	✓	✓	✓	✓	✓	✓	✓	✓
Checked by		Byoph	NP	NP	NP	US	NP	NP	NP	NP	NP
Once in a day	Equipment External Surface		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Checked by		NP	NP	NP	SN-	SN-	SN-	SN-	BP	SN-
Once in a week or before product change over *	Door and Glass View Panel				✓						
	Wall and wall panel	PH			✓						
	Pipeline, Manifold and Valve				✓						
	Fire Extinguishers				✓						
	Checked by		NA	NA	NP	NA	NA	NA	NA	NA	NA
Fortnightly or before product change over *	Ceilings and Riser							NA	NA	NA	NA
	Grills of AHU / VU										
	Checked by	NP									

Disinfectant: 2.5 % Dettol (1<sup>st</sup> to 10<sup>th</sup> of the month), 5 % Savlon (11<sup>th</sup> to 20<sup>th</sup> of the month) and 0.1 % Benzalkonium chloride (BKC) (21<sup>st</sup> to month end). Freshly prepared.

Mark: ✓ for Cleaning done.

\* Whichever is earlier.

<sup>s</sup> With Water.

Note: In case of 'Weekly Off' or 'Paid Holiday', when the cleaning activity is not done, mention it accordingly in the record, on the following working day with signature.

**Annexure-V**  
**Green Belt Photo**



**Annexure-VI**  
**Onsite Emergency Plan**

# **DISASTER MANAGEMENT PLAN**



**ASolution Pharmaceuticals Pvt. Ltd.**

PLOT NO. K - 3/8, ADDITIONAL AMBERNATH MIDC,  
ANAND NAGAR, AMBERNATH, MAHARASHTRA.

REVISION NO. 0

COPY NO.:

DOCUMENT NO.	REVISION NO.	ISSUED ON	SECTION NO.	PAGE NO.
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## SAFETY IS OUR PRIMARY CONCERN

# FOREWORD

We hereby formalize the, "ON SITE EMERGENCY PLAN", for M/s. ASolution Pharmaceuticals P. Ltd., located at Plot No. K – 3/8, Additional Ambarnath MIDC, Anand Nagar, Ambarnath, Maharashtra is not merely to comply with the requirements of Factories Act (Amendment) 1987 Section 41-b-(4), Maharashtra Factories Rules - 1963 Rule 73 Q, and Rule 13 (1) of Manufacture, Storage and Import of Hazardous Chemicals Rules 1989; but equally to minimize the harmful effects on the people, property and environment.

In spite of numerous risk mitigation measures taken and after carrying out various Hazard/ Risk Assessment Studies and Environmental Impact Analysis, prevention and control measures, a well defined and systematic approach is necessary to deal with any eventuality that may still occur. This contingency plan fulfils this objective. It will deal with incidents which may still occur and could affect people and property both on the site and in the vicinity.

The plan elaborates various aspects and assigns specific key roles to be played with corresponding responsibilities and authority. This plan is practiced by simulation of incidents which can be dealt with by Works Management. This large event will need the help of local authorities and outside agencies. The plan has been prepared duly supported by external specialists and guidance from the authorities. The emergency management plan elaborates the control efforts to be put in, by all concerned, in the event of an emergency. Regular Mock Drills with the plan are essential for its effectiveness. The plan will be modified/ revised whenever any major changes in operations are carried out. It shall be updated periodically.

We gratefully acknowledge the help and assistance of every individual who has contributed to develop this plan.

Place : Ambarnath.

Date : .

DOCUMENT NO.	REVISION NO.	ISSUED ON	SECTION NO.	PAGE NO.
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**ASOLUTION PHARMACEUTICALS P. LTD.**

Plot No. K – 3/8, Additional Ambernath MIDC, Anand Nagar, Ambernath, Maharashtra.

**ON SITE EMERGENCY PLAN**

The insertion of the additional / amended page (s) to this document and the removal of the old page (s) in the individual controlled copies as per the distribution list given below is the responsibility of the person holding the individual copy. The revised page (s) shall have signature of approval & issuing authorities including “Controlled Stamp”. All old page (s) so removed, are crossed with an inscription of the marking “OBSOLETE” and returned to the Management Representative who ensures that the same are destroyed. One copy of the earlier version of the page (s) is retained by the Management Representative.

**AMENDMENT DETAILS (IF ANY)**

AMENDMENT		DISCARD		INSERT		NOTES ON
PAGE NO.	REV.NO.	PAGE NO.	REV.NO.	PAGE NO.	REV.NO.	AMENDMENTS

**(MANAGEMENT REPRESENTATIVE)**

This plan is the property of M/s. Asolution Pharmaceuticals P. Ltd., no part of this plan in any form may be printed or reproduced without permission from the management. All inquiries regarding this plan may be directed at the above address to Management Representative who is responsible for its administration.

DOCUMENT NO.	REVISION NO.	ISSUED ON	SECTION NO.	PAGE NO.
APPL	0		01	6 OF 76

## SECTION 1: INTRODUCTION

### NAME AND ADDRESS OF THE PERSON FURNISHING THE INFORMATION

---

**Full Name & Address of the** : **Asolution Pharmaceuticals P. Ltd.**  
**Factory** Plot No. K – 3/8, Additional Ambernath MIDC,  
Anand Nagar, Ambernath, Maharashtra.

---

**Full Name & Address of the** : **Dr. Nandkumar Chodankar.**  
**Occupier** Chairman.

Cell number : 9820128716.

---

**Full Name & Address of the** : **Shri. Sandeep Kurkure.**  
**Factory Manager** Project In Charge.

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## SECTION 2: EMERGENCY ORGANISATION

### ROLE AND RESPONSIBILITIES DURING EMERGENCY

In order to achieve above objectives the role of key personnel is clearly defined to avoid confusion and to meet the emergency effectively. The Site Main Controller and the Site Incident Controller are the personnel for effective control of an emergency. As per the emergency preparedness chart the success of control of an emergency situation depends upon their timely action. The action for these persons and **Emergency Do's & Don'ts** are given in this section.

- Site Main Controller,
- Site Incident Controller,
- HSE Co-ordinator,
- Security personnel,
- Shift supervisor (Affected area),
- Shift supervisor (non affected area),
- Rescue team,
- Telephone operator,
- Outside drivers/ Owners of vehicle, &
- Any one noticing fire/ gas leak.

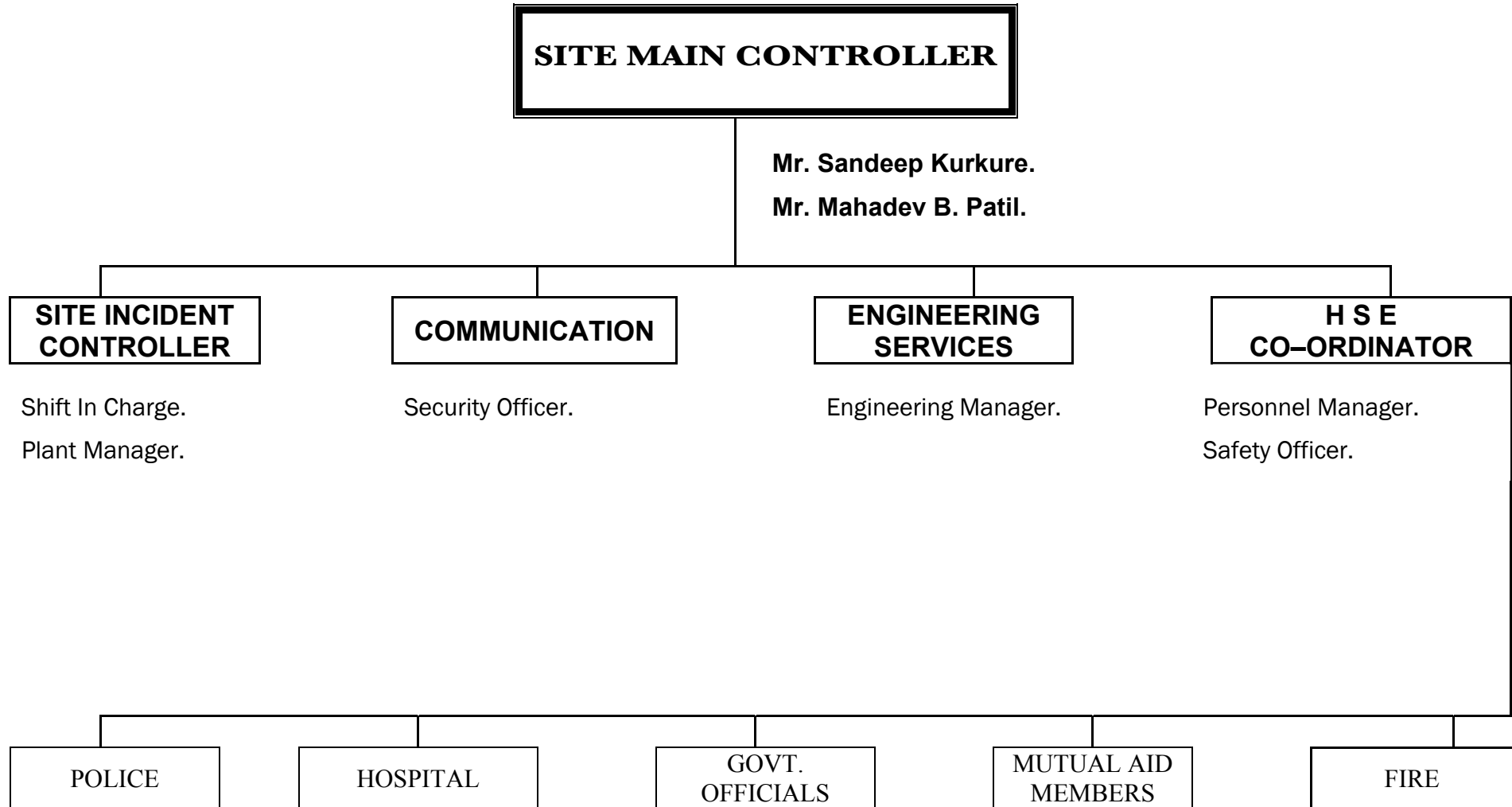
### OBJECTIVES

The objectives of the plan are as follows;

1. Controlling the emergency, localize the emergency and eliminating the hazard.
2. Welfare of persons managing the Disaster.
3. Head-Count and rescue operations.
4. Rescue of People.
5. Treatment of injured.
6. Safeguarding others by steps including evacuation.
7. Minimizing damage to property and environment.
8. Informing and assisting relatives.
9. Informing and collaborating with statutory authorities.
10. Informing the News Media.
11. Preserving records and organizing investigation.
12. Ensuring safety of the workers before personnel re-enter and resume work.
13. Investigating & taking steps to prevent recurrence.
14. Restoring normalcy.

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## EMERGENCY PREPAREDNESS ORGANISATION CHART



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## **SITE MAIN CONTROLLER**

**Mr. Sandeep Kurkure/ Mr. Mahadev B. Patil.**

He Shall,

- Be over all in charge of the situation and head of fire fighting team. Rush to the scene of fire and issue instructions for speedy combat.
- Direct all operations and call the external help from emergency control center.
- Relieve the incident controller of responsibility of overall main control of the event.
- In consultation with incident controller he will take stock of the situation considering the exact place of the leakage /fire, the time for which the leakage / fire has occurred.
- Search for the injured and/or casualties.
- Ensure that all the key persons are called on site. Delegate any extra duty to any person depending upon the situation and his judgment.
- Withdraw the staff in case of the human life is in peril.
- Call the members of MUTUAL AID.
- Report the event to the nearest district police station, fire brigade, civil defense force, district emergency officer, factory inspectorate and other voluntary body to assist to the task.
- Arrange to call the experts/ the supplier.
- Works as liaison officer between outside fire brigade & police advise on specialized technical aspects of the materials involved and internal details of the factory.
- Give clearance signal when everything becomes normal.

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## **SITE INCIDENT CONTROLLER**

Plant Manager/ Shift-In-Charge

He Shall,

- On arrival immediately assess the scale of emergency and decide if a major emergency exists or is likely.
- Activate the security head to report the emergency to Site Main Controller.
- Activate the On site action plan depending on the type of emergency.
- Assume the responsibility of the Site Main Controller till the arrival of the site main controller.
- Direct the shutdown and evacuation of the plant. Identify the areas likely to be affected by the emergency.
- Call outside emergency services like fire brigade, police, members of mutual aid.
- Give advice, information as requested by the head of the Fire Brigade, Police and Mutual Aid members.
- Make available the copies of “ON SITE EMERGENCY PLAN”.
- Brief the Site Main Controller when arrives on the scene.

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## HSE CO-ORDINATOR

In addition to his general duties of maintaining order of administration he shall discharge following duties:

He Shall,

1. Execute all directions and instruction of site main controller regarding.
  - Calling mutual aid members.
  - Specialist from the supplying company.

For efficient and successful operation of the plan statutory agencies listed below should be actively involved for guidance and help: -

- Fire Brigade.
  - Police Authorities.
  - Collectorate/ revenue officials.
  - Directorate of Industrial Safety and Health.
  - Maharashtra Pollution Control Board.
  - District Health Authorities.
  - Non Government organization.
  - Local News Media.
  - Local Leaders.
2. Supervise the duties of Security Personnel.
  3. If injuries and casualties does occur then he shall obtain names and addresses of the injured and dead.
    - Arrange for the medical aid. Talk to the hospital and doctors. Report about the type of injury/ burn injuries and or toxic effects.
    - Report to the hospital and make arrangement for likely more cases of injuries.

In consultation with the Site Main Controller he shall identify the antidote or any special medical procedure and report the same to hospitals.

He shall appoint other personnel from the factory like stores/ materials department, engineering department etc. to assist him.

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## **SECURITY PERSONNEL**

In addition to the normal duties of maintaining security at the place of work they shall discharge following duties:

He Shall,

- Be in charge of Fire Fighting and rescue operations with the assistance of essential workers and key personnel till the arrival of Fire Brigade and Police. (These operations shall be under the direct supervision of Incident Controller).
- Ask the ambulance to proceed to the scene of the incident in case of serious injury.
- Remove obstruction from the road to help Fire brigade to proceed to the scene of fire.
- Restrict entry of unauthorized and untrained persons from the scene of incident. Also don't allow unauthorized persons/ vehicles to enter the premises.
- Initiate rescue operation if required.

### **MAJOR FIRE/ EXPLOSION**

- On hearing the fire alarm, proceed to the incident immediately.
- Arrange to extinguish the fire with the help of trained personnel.
- Initiate rescue operations, if required.
- Inform Fire brigade if required.
- Control traffic for smooth and normal flow.
- Remove obstruction from the road to help Fire brigade to proceed to the scene.

### **COLLAPSE OF STRUCTURE/ SERIOUS INJURY**

- On being informed of the incident ask the ambulance to proceed to the scene.
- Depending on seriousness arrange to inform police personnel if instructed by Factory Manager.
- Control the flow of vehicles to and from factory.

### **RELEASE OF TOXIC AND HAZARDOUS MATERIAL**

- On being informed of the incident, control the flow of traffic and direct all the vehicles away from the incident.
- Liaison with HSE Co – Ordinator.



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## **RESCUE TEAM**

### **They Shall,**

- Shall report to Site Incident Controller for further instructions.
- Fire fighting, and rescue operations.
- First aid treatment to injured persons, make arrangements for sending them to outside hospitals through company ambulance or other vehicles.

### **ENGINEERING PERSONNEL**

- Electricians to ensure power supply to fire pump.

### **NOT AFFECTED SITE PERSONNEL:**

- On hearing siren switch off electrical supply.
- Assemble at assembly point, await further instructions.

### **OUTSIDE DRIVERS/ OWNER OF THE VEHICLES:**

All the truck/ tanker drivers should be instructed to move their vehicles out of the gate without obstructing the road & park the vehicle outside the main gate.

### **OFF DUTY EMPLOYEES:**

Employees who are on Off Duty & available should immediately report to the EMERGENCY CONTROL ROOM & awaiting for the instructions.

### **TELEPHONE OPERATOR:**

Should ensure that all the external lines are kept free.

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## **ANY ONE NOTICING FIRE/ GAS LEAK**

He Shall,

### **MAJOR FIRE/ EXPLOSION**

- Operate the nearest fire alarm or alert the personnel by shouting Fire!, Fire!!”
- Inform the Manager Production/ Shift Supervisor available who is In Charge of the factory at that time about the;
  - Place of Fire/ Explosion.
  - Extent of Fire fighting Action taken by him.
  - The material involved.
  - Number of persons affected.
- Try to extinguish the fire with the help of fire extinguishers, if without risk. If he is unable to extinguish the fire, he should see that the fire does not spread to nearby area.

### **COLLAPSE OF STRUCTURE/ SERIOUS INJURY**

- Inform the Manager Production/ Supervisor etc.
- Remove the injured person to a safe place. Take help of trained first-aiders.

### **RELEASE OF TOXIC AND HAZARDOUS MATERIAL**

Inform the Manager Production/ Supervisor or person available who is In Charge of the factory at that time about the.

- Place of Gas leak.
- Extent of leakage.
- Action taken by him.
- The material involved.
- Number of persons affected.

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## EMERGENCY DO'S AND DON'TS

DO'S	DON'TS
<p><b>ANY ONE NOTICING AN EMERGENCY:</b></p> <ul style="list-style-type: none"> <li>▪ Actuate nearest fire alarm button and/ or inform the Supervisor. Get back to your normal workstation (if safe) or else report to the Assembly Point.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DO NOT panic and avoid running all over the place prevent others from doing so.</li> <li>▪ DO NOT enter the site unless instructed if you are outside and disaster alarm is heard.</li> </ul>
<p><b>CONTRACTOR PERSONNEL:</b></p> <ul style="list-style-type: none"> <li>▪ Stop work on hearing alarm and assemble at the ASSEMBLY POINT and be ready to evacuate.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DO NOT enter the site until it is cleared for the normal work by Incident Controller.</li> </ul>
<p><b>SECURITY:</b></p> <ul style="list-style-type: none"> <li>▪ Keep the gate manned.</li> <li>▪ Keep the road clear for movement of fire tenders.</li> <li>▪ Control traffic at gates.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DO NOT allow unauthorized visitors free to enter.</li> </ul>
<p><b>VISITORS:</b></p> <ul style="list-style-type: none"> <li>▪ Leave the place and assemble at assembly point.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DO NOT enter the site if emergency alarm is heard.</li> </ul>
<p><b>ALL OTHER EMPLOYEES ON SITE:</b></p> <ul style="list-style-type: none"> <li>▪ On hearing FIRE/ GAS RELEASE alarm.</li> <li>▪ Get back to work place (if safe) and get instructions from supervisor.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DO NOT panic/ run.</li> <li>▪ DO NOT go to the scene of emergency unless specifically instructed by Incident Controller.</li> </ul>

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## **GENERAL INSTRUCTIONS**

- Speed is essential.
- Clarity of information and instructions to all concerned persons and authorities.
- Telephone systems are to be used only for essential communication to combat the emergency.
- In case of communication failure, send messengers by bicycle or any other transport available.
- Ensure only trained persons are deployed for combating the situation and safety procedures are followed.
- Ensure that MOCK DRILLS are conducted regularly.
- Adequate quantity of material to neutralize the risk elements should be kept ready.

## **AFTER ALL CLEAR SIGNAL**

- Investigation to avoid recurrence, recommendations and records.
- Resetting the operations - Production Manager.
- Permission from different Authorities and Final Clearance - Site Manager.

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### SECTION 3: EMERGENCY MUTUAL AID

#### 3(a) TYPE OF ACCIDENT

1. Spills,
2. Toxic Gas Leak,
3. Fire,
4. Explosion, &
5. Fall of Structure/ Building.

#### 3(b) RESPONSIBILITY ASSIGNED

##### MUTUAL AID RESPONSE GROUP

S.N.	NAME	CONTACT PERSON	TELEPHONE NUMBER
1.	Kalyan Ambernath Manufacturing Association (KAMA). Plot No. 7, MIDC Industrial Area, Phase – I, Dombivli – 421203.	Mr. Tawade.	0251 – 2470657.
2.	Ambarnath Manufacturing Association (AAMA). Plot No. P – 42, AAMA Welfare Centre, Ambarnath (East), Post Anand Nagar, Ambarnath East – 421506, Kalyan, Maharashtra.		0251-2621594. 0251-2621793.
3.			

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## **SECTION 4: CO-ORDINATION BETWEEN THE ORGANISATION**

There is formal arrangement towards Mutual Aid response group in the area and following emergency facilities are available with neighboring industries.

1. Ambulance Service.
2. Occupational Health Center.
3. Doctors and Para Medical Staff.
4. Technical Staff to assist in Emergency.
5. First-Aid equipment, Safety equipment.
6. Fire water.

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## SECTION 5: PRELIMINARY HAZARD ANALYSIS

### 5(a) TYPE OF ACCIDENTS

- Fire.
- Explosion.
- Toxic Gas Release.
- Fall of Structure.

### CAUSES OF ACCIDENTS

The causes or events that can lead to a major accident:-

Natural	Storm, Wind, Flood, Earthquake, & Lightening.
Deliberate	Sabotage, Terrorism, Civil Commotion/Armed conflicts, & Plane crash/ Air raid.
Unsafe Acts and Situations	Corrosion, Equipment failure, Design deficiency, Abnormalities in operation or maintenance, & Fire/ Emergency in neighborhood.

### 5(b) SYSTEM ELEMENTS OR EVENTS THAT CAN LEAD TO A MAJOR HAZARD

At the site disaster could be of the following type,

- Fire/ Explosion
- Large Spillage of hazardous chemicals.
- Release of flammable gas resulting in fire, explosion or gas cloud, and other forms of air pollution, thermal radiation and smoke.
- Toxic gas release from neighboring factory.
- Overturning of road tanker containing flammable/ toxic materials.
- Failure of piping containing flammable materials.
- Fall of structure or building.
- Release of high velocity fragments of ruptured equipments due to overpressure conditions.

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### 5(c) HAZARDS

Fire/ explosion HAZARD due to storage and handling of flammable chemicals.

Pressurization from exothermic reactions.

Fire/ explosion due to handling of Hydrogen.

Toxic gas release.

### 5(d) SAFETY RELEVANT COMPONENTS

SR. NO.	DESCRIPTION	SR. NO.	DESCRIPTION
1.	Scrubber.	7.	Canister type gas mask.
2.	Stock of Neutralizing materials.	8.	Emergency instructions.
3.	Leak detector.	9.	Fire Fighting system
4.	Alarm system.	10.	Mock Drill.
5.	Wind direction sock.	11.	Surveillance of operations.
6.	Safety shower and eye wash fountain.	12.	Self Contained Breathing Apparatus. (SCBA).



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## SECTION 6: IDENTIFICATION OF SITE

### 6(a) LOCATION OF DANGEROUS SUBSTANCES

#### SITE

The site is surrounded by chemical, engineering, pharmaceutical industrial units and is accessible by road. A detailed site surroundings plan is enclosed as Annexure I for ready reference.

#### LIST OF RAW MATERIALS HAVING SIGNIFICANT INVENTORY

SR. NO	LOCATION	MATERIALS	MAXIMUM QUANTITY STORED	MODE OF STORAGE
1.	Petroleum Class A Godown.	Acetone* Ethyl Acetate* Hexanes* Isopropyl Alcohol* Methanol* Toluene*	10 Kl.	Drums.

\* Hazardous chemicals.

#### FUEL

SR. NO	LOCATION	MATERIALS	MAXIMUM QUANTITY STORED	MODE OF STORAGE
1.	Utility.	Fuel Bagasse.	20 Mt.	Bagasse Storage Area.

\* Hazardous chemicals.

#### LIST OF FINISHED PRODUCTS

SR. NO.	CLASS	PRODUCT NAME	CAPACITY (TPA)
1.	Anti-diabetic	Glimepiride - API and its intermediates	2833.00
		Metformin hydrochloride - API and its intermediates	
		Glipizide	
2.	Anti-migrane	Zoledronic Acid - API and its intermediates	18.00
		Frovatriptan-API and its intermediates	
		Eletriptan	

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SR. NO.	CLASS	PRODUCT NAME	CAPACITY (TPA)
3.	Anti-hypertensive	Irbesartan PH.EUR/USP-API and its intermediates	27.00
		Trandolapril - API and its intermediates	
		Isradipine	
		Olmesartan-API and its intermediates	
		Telmisartan API and its intermediates	
		Valsartan-API and its intermediates	
4.	Aromatase inhibitor	Letrozole - API and its intermediates	7.00
		Propofol - API and its intermediates	
5.	Bipolar Disorder	Valproic acid-API and its intermediates	64.00
		Sodium valproate-API and its intermediates	
		Divalproes sodium-API and its intermediates	
		Aripiprazole-API and its intermediates	
6.	Glaucoma	Bimatoprost-API and its intermediates	36.00
		Latanoprost-API and its intermediates	
		Travoprost-API and its intermediates	
		Brimonidine-API and its intermediates	
		Betaxolol-API and its intermediates	
		Pilocarpine-API and its intermediates	
7.	Anti-Dyskinetic	Ropinirole hydrochloride	5.00
8.	Anti-platelete	Clopidogrelbisulphate USP-API and its intermediates	10.00
9.	Anti-acne	Imiquimod-API and its intermediates	15.00
		Ensulizole-API and its intermediates	
10.	Ophthalmic	Atropine-API and its intermediates	19.00
		Cyclopentolate-API and its intermediates	
		Carbachol-API and its intermediates	
		Acitazanolast-API and its intermediates	
11.	Obesity	Rimonabant-API and its intermediates	4.00
		Contrave-API and its intermediates	
12.	Tuberculosis	Rifabutin-API and its intermediates	10.00
		Simvastatin-API and its intermediates	
		Rifapentine-API and its intermediates	
13.	Urinary inconsistency	Solifenacin-API and its intermediates	12.00
		Darifenacin-API and its intermediates	
		Oxybutynin	
14.	Anti-Depressant	Escitalopram oxalate	30.00
		Paroxetine HCl	
		Imipramine HCl	
		Sertraline	
		Venlafaxine	

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SR. NO.	CLASS	PRODUCT NAME	CAPACITY (TPA)
15.	Psychotherapeutics	Bupropion HCl	12.00
		Duloxetine	
16.	Irritable bowel	Tegaserod-API and its intermediates	10.00
		Lubiprostone	
17.	Anti-histamine	Cetirizine DI-HCL-API and its intermediates	25.00
18.	Bronchodilator	Erdosterine-API and its intermediates	5.00
19.	Anti-Asthmatics	Formoterol	6.00
20.	Anti-convulsants	Fosphenytoin sodium	18.00
		Levetiracetam	
		Zonisamide	
21.	Cholesterol	Rosuvastatin calcium	12.00
		Fluvastatine	
22.	Anti-psychotic	Ziprasidone-API and its intermediates	17.00
		Risperidone	
		Olanzapine	
23.	NRTI	Zidovudine	12.00
		Lamivudine	
24.	For chronic renal failure	Sevelamer carbonate-API and its intermediates	5.00
25.	Low density	Colesevelam-API and its intermediates	5.00
26.	Anti-bacterial	Nitrofurantoin-API and its intermediates	66.00
		Moxifloxacin	
27.	Anesthetic	Prilocaine-API and its intermediates	5.00
28.	ANSAI	Nabumetone -API and its intermediates	80.00
29.	ARMD	Anecortaque acetate	10.00
30.	ADHD	Dexmethylphenedate-API and its intermediates	2.00
31.	Calcitrol	Falecalcitriol-API and its intermediates	10.00
32.	Epileptic	Pregabalin-API and its intermediates	10.00
33.	Erectile dysfunction	Alprostadil-API and its intermediates	5.00
34.	Fungal	Voriconazole-API and its intermediates	10.00
35.	Hyperuricemia	Allopurinol-API and its intermediates	60.00
36.	Parkinson	Cabergoline-API and its intermediates	5.00
37.	Thyroid	Nitisinone-API and its intermediates	2.00
38.	Cytoprotective agent	Amifostine	6.00
39.	Stimulant	Armodafinil	6.00
40.	Anti-infective	Atovaquone	6.00
41.	BPH agents	Finasteride	6.00
42.	Eugeroic	Modafinil	6.00
43.	Leukotriene receptor antagonist	Montelukast Na	6.00
44.	Gastroprokinetic agent	Mosapride	6.00

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SR. NO.	CLASS	PRODUCT NAME	CAPACITY (TPA)
45.	Proton pump inhibitor	Pantoprozole sodium	6.00
46.	ACE inhibitor	Ramipril	6.00
47.	NSAID	s + Ibuprofen	6.00
48.	PDE5 inhibitor	Tadalafil	6.00
49.	Muscle relaxant	TizanidineHCl	6.00
50.	Non-benzodiazepine hypnotic	Zopiclone	6.00
		Lamotrigine	6.00
		Lasofexifene	6.00
		LercandipineHCl	6.00
		Acyclovirs	6.00
		Ezopiclone	6.00
		<b>TOTAL</b>	<b>3590</b>

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**List of Raw Materials - Liquids (Laboratory chemicals at ware house).**

SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
1.	Dichloromethane	19.	Methyl 2-acetylamino-3-chloropropionate	37.	2-nitrile-2-(trimethylsiloxy)propane	55.	4-hydroxybenzophenone
2.	Bromine	20.	N-(1-ethoxycarbonyl-3-phenylpropyl) alanine	38.	Furan-2-carboxaldehyde	56.	Valproic acid
3.	Ethanol	21.	5'-O-Trityl-2',3'-dehydrothymidine	39.	1-Acetoxy-4-(diethylamino)-2-butyne	57.	Piperazine
4.	Aminoguanidine hydrochloride	22.	R-N-Me CBS	40.	Methyl isothiocyanate	58.	N-Aminopiperidine
5.	6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-hydroxy-5H-pyrrolo [3,4-b] pyrazine-5-one	23.	DEANB	41.	Lithium hexamethyldisilazide	59.	Mercapto Acetic Acid
6.	4-Methylpiperazine-1-carbonyl chloride	24.	1,8-Diazabicycloundec-7-ene(DBU)	42.	LDA	60.	Triethyl orthoformate
7.	1-methoxy-3-nitropropane	25.	Di-tert-butyl dicarbonate	43.	Dimethyl formamide	61.	Morpholine
8.	3-[(2-hydroxyethyl) amino] propanenitrile	26.	Diazomethane	44.	Tetrahydrofuran	62.	Cyanoacetamide
9.	(Diphenyl-methanesulfinyl)-acetic acid	27.	2,2,2-trifluoroacetic Acid	45.	Chloroform	63.	(2E)-but-2-enedial
10.	R-N-Me CBS	28.	Dimethyl (2-oxoheptyl)phosphonate	46.	Dimethyl sulphoxide	64.	3-oxopentanedioic acid
11.	4-floro phenyl magnesium bromide	29.	Ethyl piperazine-1-carboxylate	47.	Dioxane	65.	Ethyl 4-hydroxyphenyl
12.	N,N-dimethylpropan-1-amine 3 magnesium chloride	30.	Methyl (2-chloroethoxy)acetate	48.	Xylene	66.	Benzyl chloride
13.	1-(4-Benzyloxy-3-nitro-phenyl)-ethanone	31.	Cross-linked poly (ally amine)	49.	Benzene	67.	Cyclopropyl benzyl bromide
14.	1-p-Methoxyphenyl-2-benzyl amino propane	32.	(Bromomethyl)cyclopropane	50.	Acetonitrile	68.	Epichlorohydrin
15.	Methyl 3-oxobutanoate	33.	1,2-Phenylenediamine	51.	Acetone	69.	Isopropyl amine
16.	2,1,3-benzoxadiazole-4-carbaldehyde	34.	4-hydrazinylbenzonitrile	52.	Cyclohexane	70.	2-Iodopropane
17.	[(diphenylmethyl)sulfinyl]acetic acid	35.	(2-isocyanatoethyl)benzene	53.	N-Methyl pyrrolidinone	71.	Aq. ethyl amine
18.	2-(Aminomethyl)-4-(4-fluorobenzyl)-morpholine	36.	p-Cyanobenzylbromide	54.	n-butanol		

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### List of Raw Materials - Liquids (Laboratory chemicals at ware house)

SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
72.	Ethyl isocyanate	93.	Diethyl propanedioate	114.	Benzoyl chloride	135.	3-chloropropanoyl chloride
73.	2-Chloroethyl carbamate	94.	n-propyl amine	115.	Chloroacetyl chloride	136.	N-Isopropyl aniline
74.	2-Methyl,2 Propyl -1,3-propen-Diol	95.	4-Hydroxybenzoic acid	116.	Tetra ethyl silane	137.	3-(dimethylamino)propanal
75.	1-Bromodecane	96.	Valeryl chloride	117.	1,3-Dioxolane	138.	2-oxoethyl benzoate
76.	Cyclopentanone	97.	Propinaldehyde	118.	3'-Chloropropiophenone	139.	(4-methoxyphenyl)acetonitrile
77.	Isopropyl magnesium chloride	98.	Thiosemicarbazide	119.	2-methylpropan-2-amine	140.	Cyclohexanone
78.	(2-Chloro-ethyl)-dimethyl-amine	99.	Pentylamine	120.	Cyclohexyl isocyanate	141.	Methyl magnesium chloride
79.	Piperidine -2-carboxylic acid	100.	5-methoxy-1H-indole-3-carbaldehyde	121.	Iminobenzyl	142.	Dimethyl Formamide
80.	Di-tert-butyl dicarbonate	101.	Cyano trimethylsilane	122.	3-chloro-N,N-dimethylpropan-1-amine	143.	Lithium hexamethyldisilazide
81.	Diazomethane	102.	Boron trifluoride etherate	123.	2, 3 dichlorobenzene	144.	Hydrazine hydrate
82.	Benzaldehyde	103.	4-Ethylmorpholine	124.	Propionaldehyde	145.	Formamide
83.	1,3-Dibromo-5,5-dimethylhydantoin	104.	Diethyl dipropyl malonate	125.	methyl cyanoacetate	146.	Liq. NH3
84.	2,4,6-Collidine	105.	n-pentyl acid chloride	126.	N-Methyl piperazine	147.	oxalyl chloride
85.	Chlorosulphonic acid	106.	Ethyl 2-fluoro-3-oxopentanoate	127.	Chloroacetyl chloride	148.	Triethyl amine
86.	3-Chloroacetamido-2-oxo-tetrahydrothiophene	107.	Imidoformamide	128.	1,2 diaminoethane	149.	Dichloroethylene
87.	Mercapto Acetic Acid	108.	Ethyl chloro(oxo)acetate	129.	Methane sulfonyl chloride	150.	Methyl lithium in THF
88.	1,3cyclohexadione	109.	4'-Chloropropiophenone	130.	(S)-alpha-Methyl benzylamine	151.	Acetic anhydride
89.	Furfural	110.	2,2-Dimethoxypropane	131.	Dimethyl sulfate	152.	Formic acid
90.	Amyl alcohol	111.	2,2-Dimethylbutyryl chloride	132.	Thiophene	153.	N-methylpyrrolidone
91.	Di-tert-butyl 2-acetylamino-malonate	112.	4-(Dimethylamino)-pyridine	133.	3-chloropropanoyl chloride	154.	Acetic acid
92.	3-methylbutanal	113.	2-phenyl ethylamine	134.	Fluorobenzene	155.	Boron trifluoride etherate

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### List of Raw Materials - Liquids (Laboratory chemicals at ware house)

SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
1.	1,4-Dibromobutane	9.	Dimethyl Carbonate	17.	POCl <sub>3</sub>	25.	Ethyl acetate
2.	Methyl amine	10.	Pyridine	18.	Formaldehyde	26.	Toluene
3.	Benzyl chloride	11.	Perchloric Acid	19.	Phosphorous oxychloride	27.	Hexane
4.	MEM-Cl	12.	Benzyl magnesium chloride	20.	Hydrochloric acid	28.	Isopropyl alcohol
5.	Diisopropyl amine	13.	Cyclopentanone	21.	Sulfuric acid	29.	o-Toluidine
6.	DIBAL H	14.	Isopropyl magnesium chloride	22.	Nitric acid	30.	Water
7.	NaHMDS in THF	15.	Thionyl Chloride	23.	n-butyl lithium		
8.	Aq. ethyl amine	16.	Benzyl alcohol	24.	Methanol		

### List of Raw Materials – Solids (Laboratory chemicals at ware house)

SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
1.	6-methoxy-2-naphthaldehyde	9.	Diethyl (3,3-difluoro-2-oxoheptyl)phosphonate	17.	1-fluoronaphthalene	25.	Imidazolyl acetic acid
2.	2-Propyl-4-methyl-6-(1-methylbenzimidazole-2-yl)Benzimidazole	10.	Dicyandiamide	18.	5-bromo-3-[(2R)-1-methylpyrrolidin-2-yl]methyl]-1H-indole	26.	Phosphorous trichloride
3.	4'-Bromomethylbiphenyl-2-carbonitrile	11.	2,4-Dichlorophenylhydrazine	19.	1-oxo-1,3-dihydro-2-benzofuran-5-carbonitrile	27.	3-Aminobenzonitrile
4.	1-(Bromomethyl)-4-iodobenzene	12.	4R,6R)-4-Hydroxy-6-{2-[(1S,2S,6R,8S,8aR)-8-hydroxy-2,6-dimethyl-1,2,6,7,8,8a-hexahydronaphthalen-1-yl]ethyl}tetrahydro-2H-pyran-2-one	20.	Propan-2-yl (2E)-3-aminobut-2-enoate	28.	4,5,6,7-tetrahydrothieno[3,2-c]pyridine hydrochloride
5.	Methyl (2R)-2-amino-3-methylbutanoate	13.	R-(-)-3-Quinuclidinol	21.	6-methoxy-3,4-dihydronaphthalen-1(2H)-one	29.	Methyl bromo(2-chlorophenyl)acetate
6.	Tetraphosphine/palladium	14.	3-Chloroacetamido-2-oxo-tetrahydrothiophene	22.	1-[2-(4-bromophenoxy)ethyl]pyrrolidine	30.	2,2-Diphenyl-2-[(3S)-pyrrolidin-3-yl]acetamide
7.	2-tetrazolylphenyl boronic acid	15.	2,4-dichloronitrobenzene	23.	Phenyl boronic acid	31.	5-(2-Bromoethyl) benzofuran
8.	1-(2,4-difluorophenyl)-2-(1H-1,2,4-triazol-1-yl)ethanone	16.	3-(piperazin-1-yl)-1,2-benzothiazole	24.	1-cyclopentenylpyrrolidino	32.	Diethyl (2-oxo-4-phenylbutyl)phosphonate



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SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
33.	1-Aminohydantoin	52.	Pottasium acetate	71.	Sodium chloride	90.	Ferric chloride
34.	Guanine	53.	Potassium iodide	72.	Deminerlized water	91.	Lithium Aluminum hydride
35.	Zopiclone	54.	Potassium carbonate	73.	Sodium hydrogen carbonate	92.	Sodium azide
36.	D(+)-Malic Acid	55.	Sodium iodide	74.	Sodium phenylacetate	93.	Jones reagent
37.	5,5-Diphenylhydantoin	56.	Sodium acetate	75.	Pyridium dichromate	94.	DMA-HCL
38.	5-Methyl-2-pyrazinecarboxylic acid	57.	Lithium aluminum hydride	76.	Rhodium on carbon	95.	Phosphorus pentoxide
39.	4-(2-Aminoethyl)-benzenesulfonamide	58.	CDI	77.	Sodium hydride	96.	L-Tartaric acid
40.	ethyl oxamate	59.	Sodium ethoxide	78.	Succinic acid	97.	Tin metal
41.	<i>N</i> [4-(4-fluorophenyl)-5-(hydroxymethyl)-6-(propan-2-yl)pyrimidin-2-yl]- <i>N</i> -methylmethanesulfonamide	60.	Sodium hydroxide	79.	Sodium Metabisulfite	98.	Iron
42.	Potassium 2-methylpropan-2-olate	61.	Citric acid	80.	Tri-n butyl tin chloride	99.	Ammonium bromide
43.	Methyl 3-oxobutanoate	62.	Cerium(III) chloride heptahydrate (CeCl <sub>3</sub> .7.H <sub>2</sub> O)	81.	4-Toluenesulfonic acid	100.	p-toluene sulfonic acid
44.	2,2-dimethoxyethanethiol	63.	Sodium bisulphate	82.	Potassium t-but oxide	101.	Caesium carbonate
45.	Silylated cytosine	64.	Sodium sulphate	83.	Raney Ni	102.	Pottasium carbonate
46.	Tartaric acid	65.	Copper(I)chloride	84.	Tartaric acid	103.	Potassium t-butoxide
47.	2-(chloromethyl)-4-methoxypyridin-3-ol hydrochloride	66.	Triphenylphosphine	85.	Potassium cyanide	104.	Sulphur
48.	6-(difluoromethoxy)-1H-benzimidazole-2-thiol	67.	Sodium methoxide	86.	Ferrous sulphate	105.	Titannium tetrachloride
49.	Tert-butyl 4-(3,4-dichlorophenyl)-4-oxobutanoate	68.	Potassium hydroxide	87.	Sodium sulphite	106.	Activated charcoal
50.	Ammonium chloride	69.	Sodium carbonate	88.	Sodium Nitrite	107.	Hyflo
51.	AgNO <sub>3</sub>	70.	Potassium hydroxide	89.	Zinc		

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SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
108.	D(+)-Malic Acid	121.	3-Chlorobenzonitrile Ethyl magnesium bromide	134.	1,2,4-Triazole	147.	Polyallylamine carbonate
109.	Sodamide	122.	Benzotriazol-1-yloxytris (dimethylamino)-phosphonium	135.	4-Fluorobenzonitrile	148.	1-Hydroxybenzotriazole
110.	Cesium chloride	123.	N-Methoxy methyl amine hydrochloride	136.	2-Nitro-4-(trifluoromethyl)benzoyl chloride	149.	N,N'-Dicyclohexylcarbodiimide
111.	Corey lactone	124.	1-Methyl-1-phenyl-1-(2-pyridyl) hydrochloride	137.	N-(triphenylmethyl)-5-(4'-bromomethyl biphenyl-2-yl)tetrazole	150.	Diethyl (trifluoromethyl)phenoxy] acetyl]phosphonate
112.	Androstadien -3,17-dione	125.	2-Dimethylethyl methanol hydrochloride	138.	2-Cyclohexylmandelic acid	151.	Palladium acetate
113.	7-Hydroxy-3,4-dihydro-2(1H)-quinolinone	126.	3, 4-diaminobenzene sulfonic acid	139.	Ethylmalonic acid diethyl ester	152.	Copper(I) bromide
114.	1-(2,3Dichlorophenyl) piperazine	127.	Hexa fluoro1-alpha, 25-Dihydroxycholesterol	140.	Rifamycin s	153.	Copper(I) iodide
115.	6-Allyl-N-[3(dimethylamino)propyl]-8beta-ergolinecarboxamide	128.	3,3-dimethyl-1,5-dioxaspiro[5.5]undecan-9-one	141.	Hexa methyl tetra amide	154.	Palladium carbon
116.	1-chloro-4-[chloro(phenyl)methyl]benzene	129.	Methylamine hydrochloride	142.	N-isobutylpiperidin-4-one	155.	Indole
117.	16 alpha-Hydroxyprednisolone	130.	3-ethyl-4-methyl-1,5-dihydro-2H-pyrrol-2-one	143.	3-Formylrifamycin	156.	Sodium hydride
118.	2-Diethylamine ethylchloride hydrochloride	131.	2-butyl-1,3-diazaspiro[4.4]non-1-en-4-one Hydrochloride	144.	Phthalimido Aldehyde	157.	Sodium borohydride
119.	4-[2-(diethylamino)ethoxy]phenyl}(phenyl)methanone	132.	4'-(bromomethyl)biphenyl-2-carbonitrile	145.	5-(N-Benzyl-N-tert-butyl glycylyl) salicylic acid methyl ester hydrochloride	158.	Sodium metal
120.	1-Bromo-6-(trimethyl ammonium) hexyl bromide	133.	4-chloromethyl-5-methyl-1,3-dioxolen-2-one	146.	Tetramethylammonium tetrafluoroborate		

### List of Raw Materials - Compressed Gas Cylinders

SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME	SR. NO.	NAME
1.	Hydrogen	2.	Helium	3.	Acetylene	4.	Argon
5.	Nitrogen						

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## PROCESS

Manufacturing process mainly consists of unit processes such as;

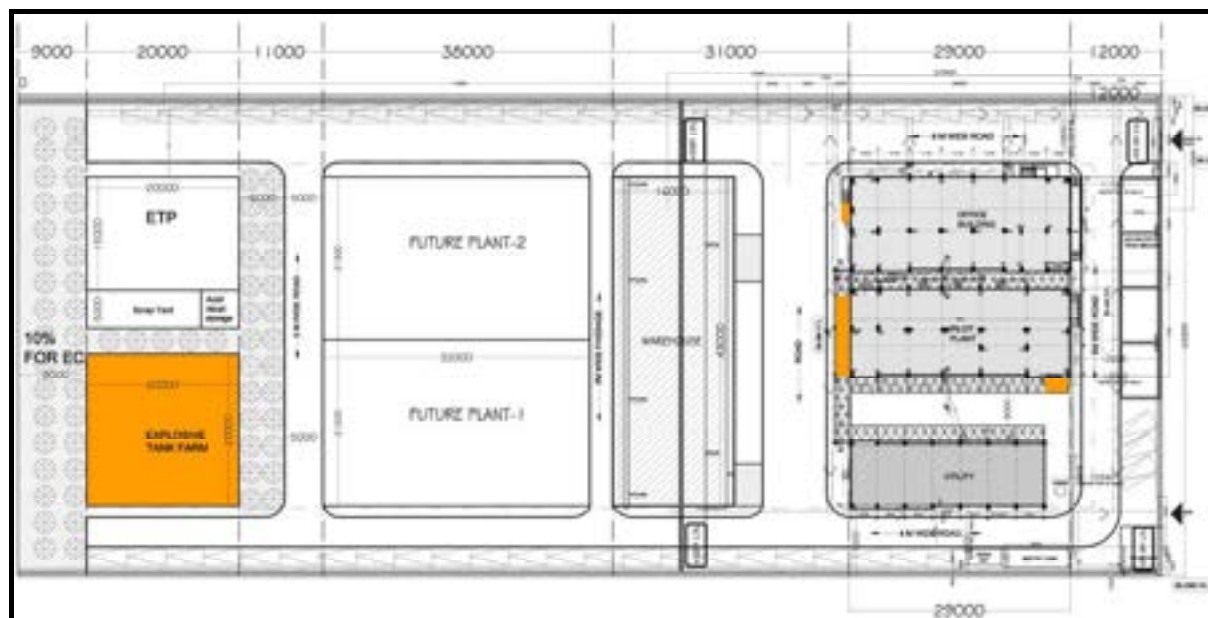
- Alkylation, Amination, Condensation, Esterification, Halogenation, Hydrogenation, Hydrolysis, Nitration, Oxidation etc.

And related Chemical reactions and unit operations such as;

- Absorption, Adsorption, Centrifugation, Crystallisation, Distillation, Drying, Evaporation, Extraction, Filtration, Milling, Charcoal treatment as detailed in HAZOP Study report.

## LOCATION OF HAZARDOUS SUBSTANCES

SR.NO.	HAZARDOUS SUBSTANCES	LOCATIONS
1.	Flammable solvents.	Solvent store.
2.	Laboratory chemicals.	Laboratory.
3.	Hydrogen cylinder.	Outside Laboratory on ground floor.
4.	Acetylene cylinder.	During maintenance only.



## 6(b) SEAT OF KEY PERSONNEL

The seat of key personnel is located at the Emergency Control Room. It is marked on the map and board displayed at site.

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### 6(c) EMERGENCY CONTROL ROOM

EMERGENCY CONTROL ROOM as marked on site plan will be focal point in case of an emergency, from where the operations to handle the emergency are directed and co – ordinated by Site Main Controller.

#### **EMERGENCY CONTROL ROOM, will be equipped with following items;**

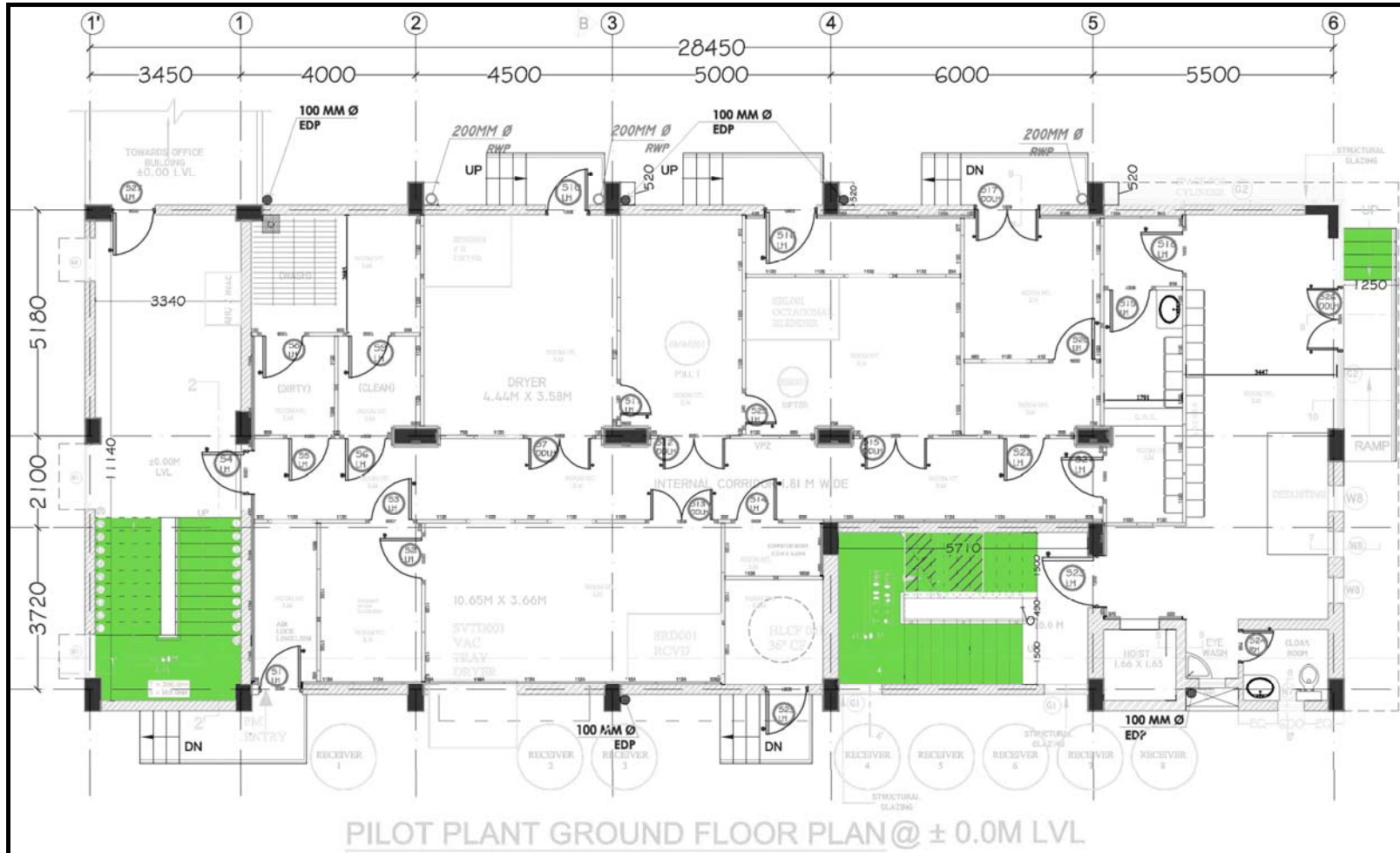
1. Copy of “On Site Emergency Plan”
2. Telephone (Internal and External).
3. Note pads, pencil etc. to record messages received and any instructions to be passed on through runners.
4. Antidotes.
5. Flameproof torch.
6. Technical Manuals on operating, maintenance procedures.
7. PROTECTIVE WEARS.

Following Personal Protective Equipments (PPE) are kept in emergency control room for use in case of emergency.

SR. NO.	NAME
1.	Gas Masks.
2.	Safety Goggles.
3.	Safety Shoes.
4.	Hand Gloves.
5.	Overall Apron.

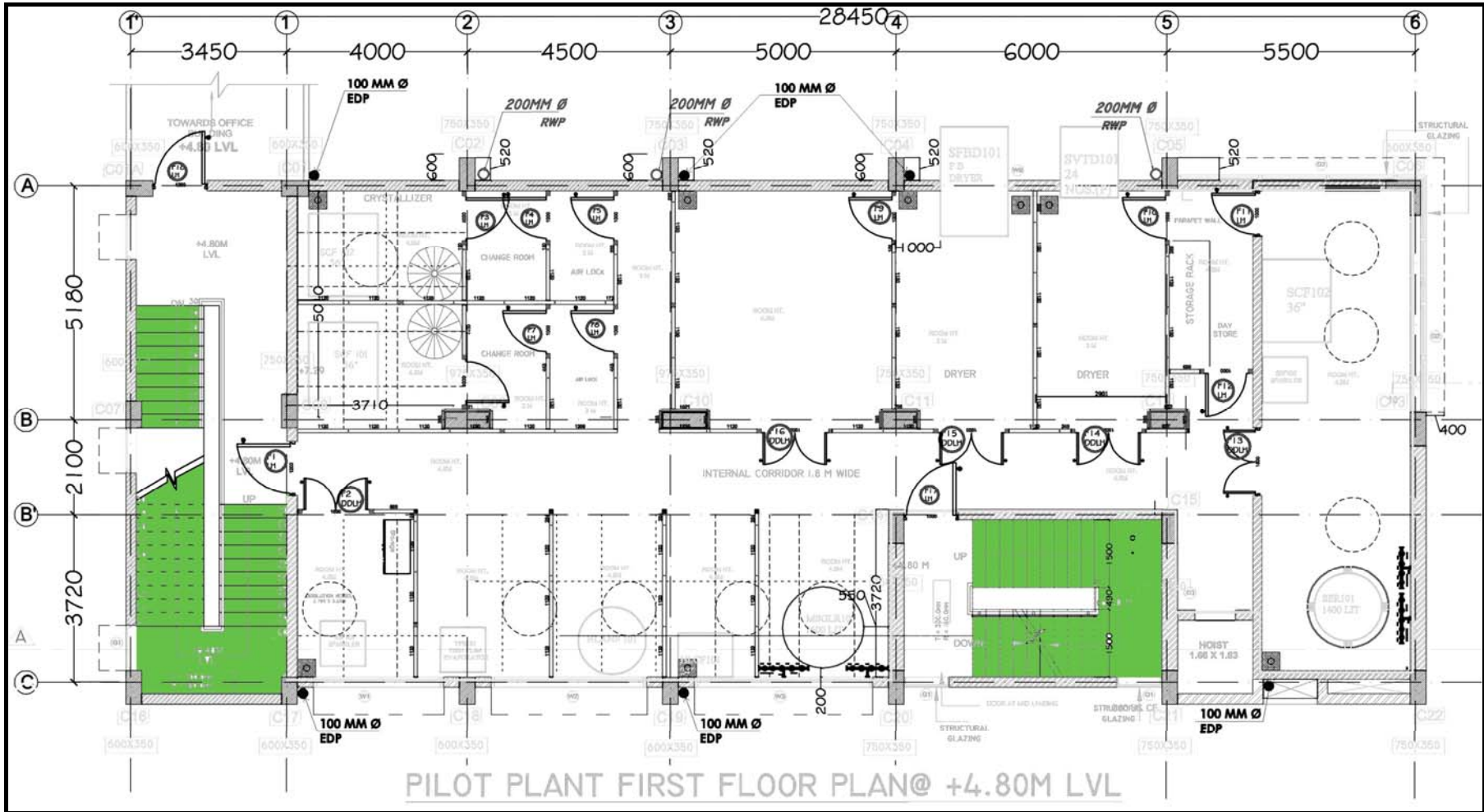
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## GROUND FLOOR PLAN.



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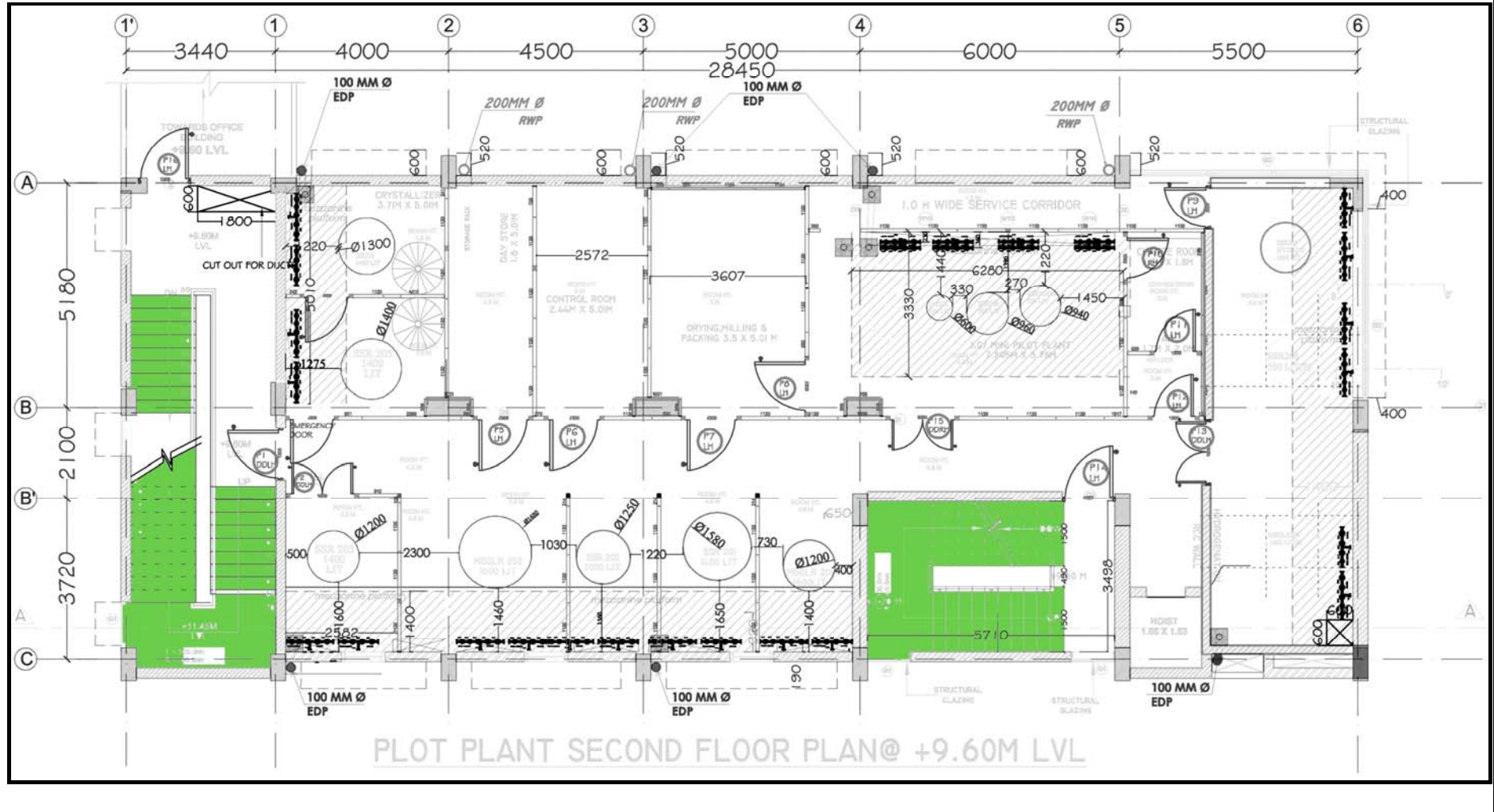
## FIRST FLOOR PLAN.





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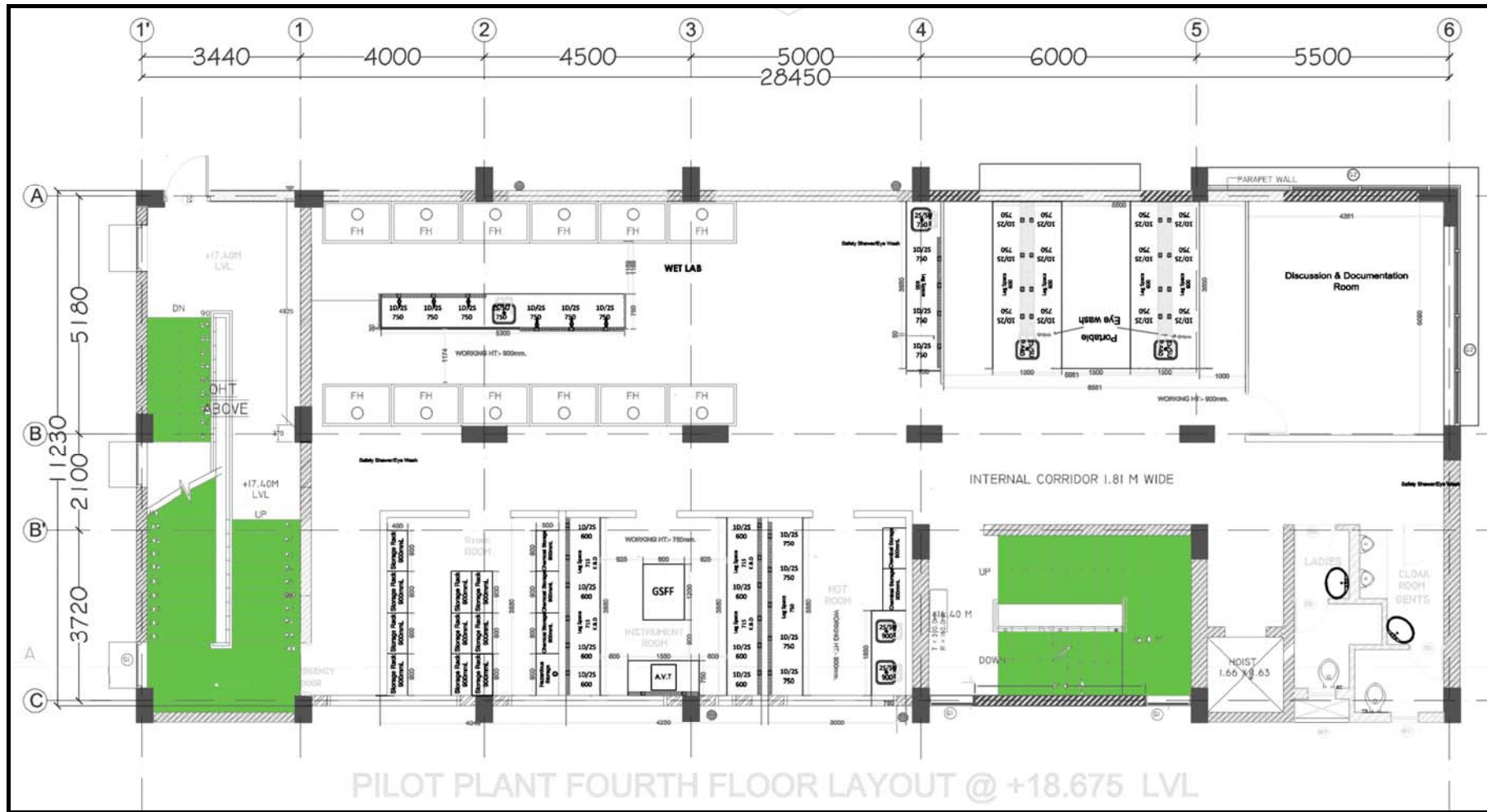
## SECOND FLOOR PLAN.







### FORTH FLOOR PLAN.



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## SECTION 7: HAZARDOUS CHEMICALS

### 7(a) CHEMICALS (QUANTITIES AND TOXICOLOGICAL DATA)

In the manufacturing operations various flammable/ toxic/ corrosive materials, compressed gases are utilized. Also the stock of combustible materials is maintained. These items have potential to lead to accidents/ fires explosion etc. The description of hazardous chemicals handled at the plant site are listed in the following table.

**TABLE NO. 1: CHEMICALS HANDLED AT SITE**

SR. NO.	NAME	MAXIMUM QUANTITY STORED	TOXICITY				
			LD <sub>50</sub>	LC <sub>50</sub>	TLV	STEL	IDLH
			mg/kg oral-rat	inhal rat	ppm	mg/m <sup>3</sup>	ppm
1.	Acetone.	*	—	—	—	1275	—
2.	Diesel.	0.4 Kl.	—	—	—	—	—
3.	Ethyl Acetate.	*	—	—	—	—	—
4.	Hexanes.	*	—	—	—	—	—
5.	Hydrochloric Acid	< 1 Mt.	—	—	—	—	—
6.	Hydrogen.	1 Cylinders	—	—	—	—	—
7.	Isopropyl Alcohol.	*	—	—	—	1225	—
8.	Methanol.	*	—	—	—	250	—
9.	Toluene.	*	—	—	—	—	—

\* all solvents up to a maximum quantity of 20 Kl.

### 7(b) TRANSFORMATION IF ANY WHICH COULD OCCUR

S.N.	NAME	DECOMPOSITION PRODUCTS IN CASE OF FIRE
1.	Acetone.	Carbon dioxide and carbon monoxide may form when heated to decomposition.
2.	Diesel.	Carbon dioxide and carbon monoxide may form when heated to decomposition.
3.	Ethyl Acetate.	Carbon dioxide and carbon monoxide may form when heated to decomposition.
4.	Hexanes.	May produce acrid smoke and irritating fumes when heated to decomposition.

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S.N.	NAME	DECOMPOSITION PRODUCTS IN CASE OF FIRE
5.	Hydrochloric Acid.	When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive Hydrogen gas.
6.	Hydrogen.	Water vapor.
7.	Isopropyl Alcohol.	Carbon dioxide and carbon monoxide may form when heated to decomposition.
8.	Methanol.	Carbon dioxide and carbon monoxide may form when heated to decomposition.
9.	Toluene.	Carbon dioxide and carbon monoxide may form when heated to decomposition.

### 7(c) PURITY OF HAZARDOUS CHEMICALS

SR. NO.	HAZARDOUS INGREDIENTS	PURITY
1.	Solvents.	Lab grade.
2.	HSD.	Mixed Hydrocarbon.
3.	Hydrochloric Acid.	30 %.

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## SECTION 8: LIKELY DANGERS TO THE PLANT

SR. NO.	ACCIDENT SCENARIO	CAUSES	CONSEQUENCE ZONE
1.	Minor Spill.	<ul style="list-style-type: none"> <li>▪ Hose failure.</li> <li>▪ Pipe line/ pump gland leakage.</li> <li>▪ Gasket failure.</li> <li>▪ Spill of acidic/ alkaline/ flammable material.</li> </ul>	Local.
2.	Large Spill.	<ul style="list-style-type: none"> <li>▪ Failure of bottom valve or Catastrophic failure of reactor/ storage tanks.</li> <li>▪ Overturning of tanker.</li> </ul>	Off Site Potential.
3.	Fire.	<ul style="list-style-type: none"> <li>▪ Any spill of flammable material catching fire on finding of ignition source.</li> </ul>	Local.
4.	Release of toxic gas.	<ul style="list-style-type: none"> <li>▪ Release of Toxic gas due to piping failure, scrubber malfunctioning etc.</li> </ul>	Off Site Potential.
5.	Explosion. Release of high velocity fragments of ruptured equipment due to over pressure condition.	<ul style="list-style-type: none"> <li>▪ Run away reaction,</li> <li>▪ Uncontrolled exothermic reaction,</li> <li>▪ Pressure development.</li> </ul>	Off Site Potential.
6.	Electric Fire.	<ul style="list-style-type: none"> <li>▪ At electrical installations,</li> <li>▪ Transformer area,</li> <li>▪ Loose cable,</li> <li>▪ Overloading on cables etc.</li> </ul>	Local.
7.	Fall of Structure.	<ul style="list-style-type: none"> <li>▪ Earthquake, poor maintenance.</li> </ul>	Local.
8.	Air, Water, Soil Pollution.	<ul style="list-style-type: none"> <li>▪ Leak of spill of any material – Solid, Liquid or Gaseous.</li> </ul>	Off Site Potential.
9.	Heavy rain fall/ Flooding.	<ul style="list-style-type: none"> <li>▪ Natural calamity.</li> </ul>	Off Site Potential.
10.	Risks from surrounding company.	<ul style="list-style-type: none"> <li>▪ Due to leak of toxic gas from the process/ storage tank/ cylinders etc.</li> <li>▪ Explosion in reactor or tank due to overpressure.</li> <li>▪ Due to unsafe material handling, loading – unloading and failure in process control.</li> </ul>	Off Site Potential.

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## SECTION 9: CONSEQUENCE ANALYSIS

### 9(i) STRESS AND STRAIN DURING NORMAL OPERATION

Possible release of hazardous chemicals or energy can be consequence of following events;

1.	Release of Hexane from Hexane container/ barrel.
2.	Release of Methanol from Methanol container/ barrel.
3.	Release of Acetone from Acetone container/ barrel.
4.	Release of Toluene from Toluene container/ barrel.
5.	Release of IPA from IPA container/ barrel.
6.	Release of Diesel Oil from container/ barrel.
7.	Release of Hydrogen from cylinder.
8.	Hydrogen cylinder involved in local fire.
9.	Hydrogen Chloride gas escaping from scrubber vent.

These accident scenarios are divided in two categories considering the consequence seriousness and occurrence frequency.

- **MAXIMUM CREDIBLE LOSS SCENARIO (MCLS).**
- **WORST POSSIBLE SCENARIO.**

#### MAXIMUM CREDIBLE LOSS SCENARIO (MCLS)

Maximum Credible Loss Scenario (MCLS) is one of the methodologies evolved to access the events in realistic and practical way. An MCLS can be described as the worst “credible” accident or as an accident with a maximum damage distance, which is still believed to be probable. The analysis, however, does not include a quantification of the probability of occurrence of an accident.

The MCLS aims at identifying undesirable and hazardous events causing the Maximum damage to human beings environment around the industry under the consideration.

Leak from storage tank/ piping failure are quite probable events. The liquid spill will evaporate from the liquid pool at a rate which depends upon the temperature and thermal conductivity of the ground and vapors if finds a source of ignition lead to pool fire release of energy in the form of thermal radiations are considered as MCLS.

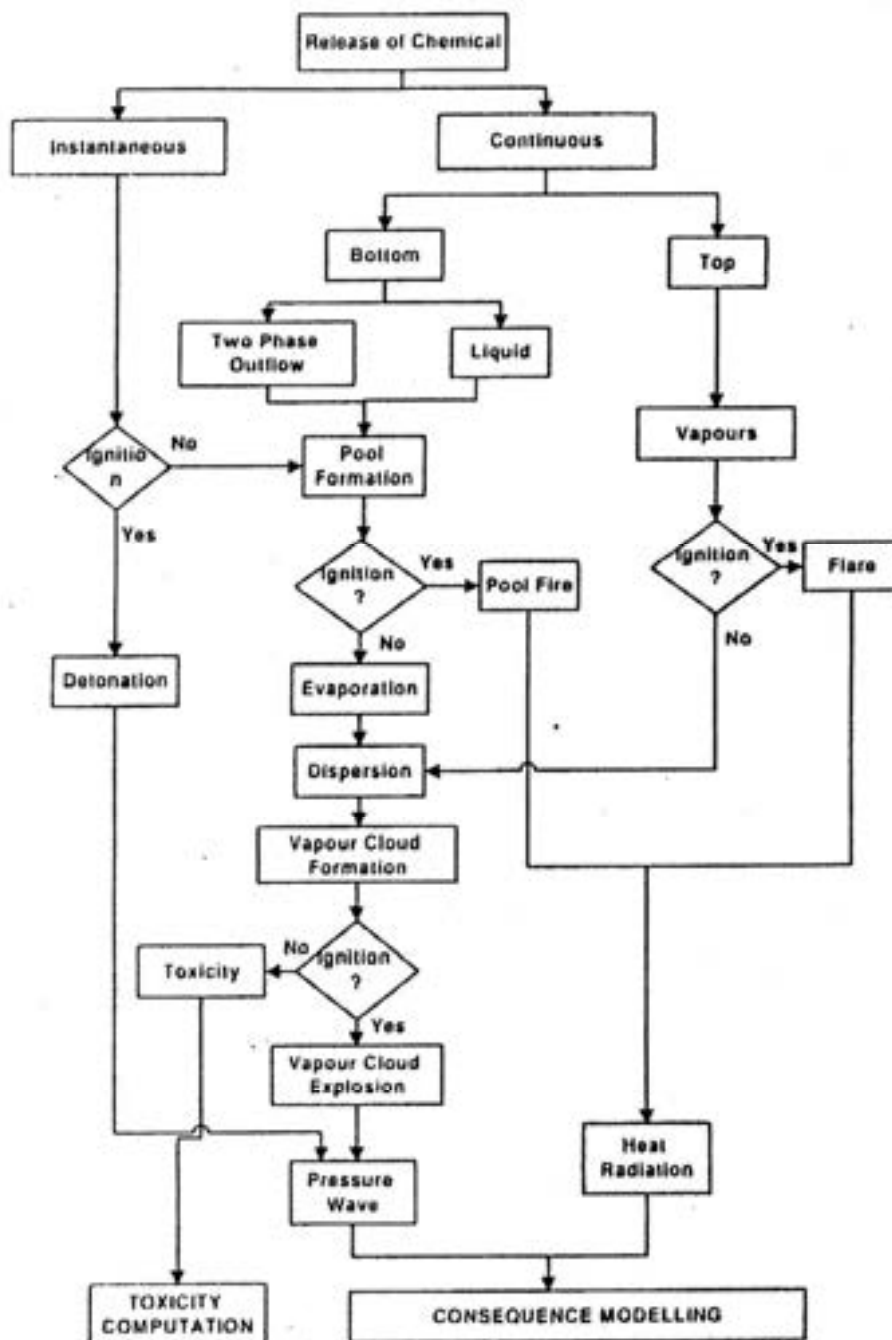
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## WORST POSSIBLE SCENARIO

Catastrophic failure of the container/ barrel of flammable solvent followed by fire OR Hydrogen cylinder involved in local fire leads to disastrous situation and are considered as a WORST POSSIBLE SCENARIO, however the probability is very low.

Simulation of the Consequences of such events is shown in the following flow chart.

## SIMULATION OF CONSEQUENCE



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9(ii) FIRE AND EXPLOSION IN SIDE THE PLANT AND EFFECT IF ANY, OF FIRE AND EXPLOSION OUT SIDE.

**ACCIDENT SCENARIO NO. 1: ACETONE LEAK FROM BARREL.**

CHEMICAL NAME: ACETONE.					
Mole Weight	58.08 g/mol	Ambient B.P.	56.3 °C	VP. at ambient temp.	0.37 atm
PAC -1	200 ppm	PAC -2	3200 ppm	PAC -3	5700 ppm
IDLH		LEL	26000 ppm	UEL	128000ppm
Ambient Saturation Concentration: 375,809 ppm or 37.6 %.					
SOURCE STRENGTH					
Sustained release rate = 2.88 Kg/min.					

Model Run: Gaussian

**THREAT MODELED: TOXIC AREA OF VAPOR CLOUD**

**THREAT ZONE**

Red	PAC - 3 5700 ppm.	< 10 meters.
Orange	PAC - 2 3200 ppm.	< 10 meters.
Yellow	PAC - 1 200 ppm.	47 meters.

**THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD**

**THREAT ZONE**

Red	15,600 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	2,600 ppm = 10% LEL.	< 10 meters.

**THREAT MODELED: OVER PRESSURE (BLAST FORCE)**

**VAPOR CLOUD EXPLOSION**

No explosion: no part of the cloud is above the LEL at any time.

POOL FIRE MODEL	
Burn Rate = 9.5 Kg/min	Flame Height = 4 meters.

**THREAT MODELED:**

**THERMAL RADIATION FROM POOL FIRE**

S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 10.0 KW/sq.m (potentially lethal within 60 sec).	< 10 meters.
2.	Distance to 5.0 KW/sq.m (2 <sup>nd</sup> degree burns within 60 sec).	< 10 meters.
3.	Distance to 2.0 KW/sq.m (pain within 60 sec).	< 10 meters.

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## ACCIDENT SCENARIO NO. 2: ETHYL ACETATE LEAK FROM BARREL.

CHEMICAL NAME: ETHYL ACETATE					
Mole Weight	88.11 g/mol	Ambient B.P.	77.0 °C	VP. at ambient temp.	0.16 atm
PAC -1	400 ppm	PAC -2	400 ppm	PAC -3	10000 ppm
IDLH	2000 ppm	LEL	21800 ppm	UEL	128000ppm
Ambient Saturation Concentration: 156,287 ppm or 15.6%.					
SOURCE STRENGTH					
Sustained release rate = 2.73 Kg/min.					

Model Run: Gaussian

### THREAT MODELED: TOXIC AREA OF VAPOR CLOUD

#### THREAT ZONE

Red	PAC - 3 10000 ppm.	< 10 meters.
Orange	PAC - 2 400 ppm.	22 meters.
Yellow	PAC -1 400 ppm.	22 meters.
	IDLH 2000 ppm.	< 10 meters.

### THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD

#### THREAT ZONE

Red	13080 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	2,180 ppm = 10% LEL.	< 10 meters.

### THREAT MODELED: OVER PRESSURE (BLAST FORCE)

#### VAPOR CLOUD EXPLOSION

No explosion: no part of the cloud is above the LEL at any time.

POOL FIRE MODEL	
Burn Rate = 9.63 Kg/min	Flame Height = 4 meters.

#### THREAT MODELED:

#### THERMAL RADIATION FROM POOL FIRE

S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 10.0 KW/sq.m (potentially lethal within 60 sec).	< 10 meters.
2.	Distance to 5.0 KW/sq.m (2 <sup>nd</sup> degree burns within 60 sec).	< 10 meters.
3.	Distance to 2.0 KW/sq.m (pain within 60 sec).	< 10 meters.



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### ACCIDENT SCENARIO NO. 3: HEXANE LEAK FROM BARREL.

CHEMICAL NAME: N-HEXANE					
Mole Weight	86.18 g/mol	Ambient B.P.	68.6 °C	VP. at ambient temp.	0.25 atm
TEEL-1	400 ppm	TEEL-2	3300 ppm	TEEL-3	8600 ppm
IDLH	1100ppm	LEL	10500 ppm	UEL	76800 ppm
Ambient Saturation Concentration: 248,295 ppm or 24.8 %.					
SOURCE STRENGTH					
Sustained release rate 2.89 Kg/min.					

Model Run: Gaussian

### THREAT MODELED: TOXIC AREA OF VAPOR CLOUD

#### THREAT ZONE

Red	PAC -3 8600 ppm	< 10 meters.
Orange	PAC -2 3300ppm	< 10 meters.
Yellow	PAC -1 300 ppm	29 meters.
	IDLH 1100 ppm	11 meters.

### THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD

#### THREAT ZONE

Red	7200 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	1200 ppm = 10% LEL.	11 meters.

### THREAT MODELED: OVER PRESSURE (BLAST FORCE)

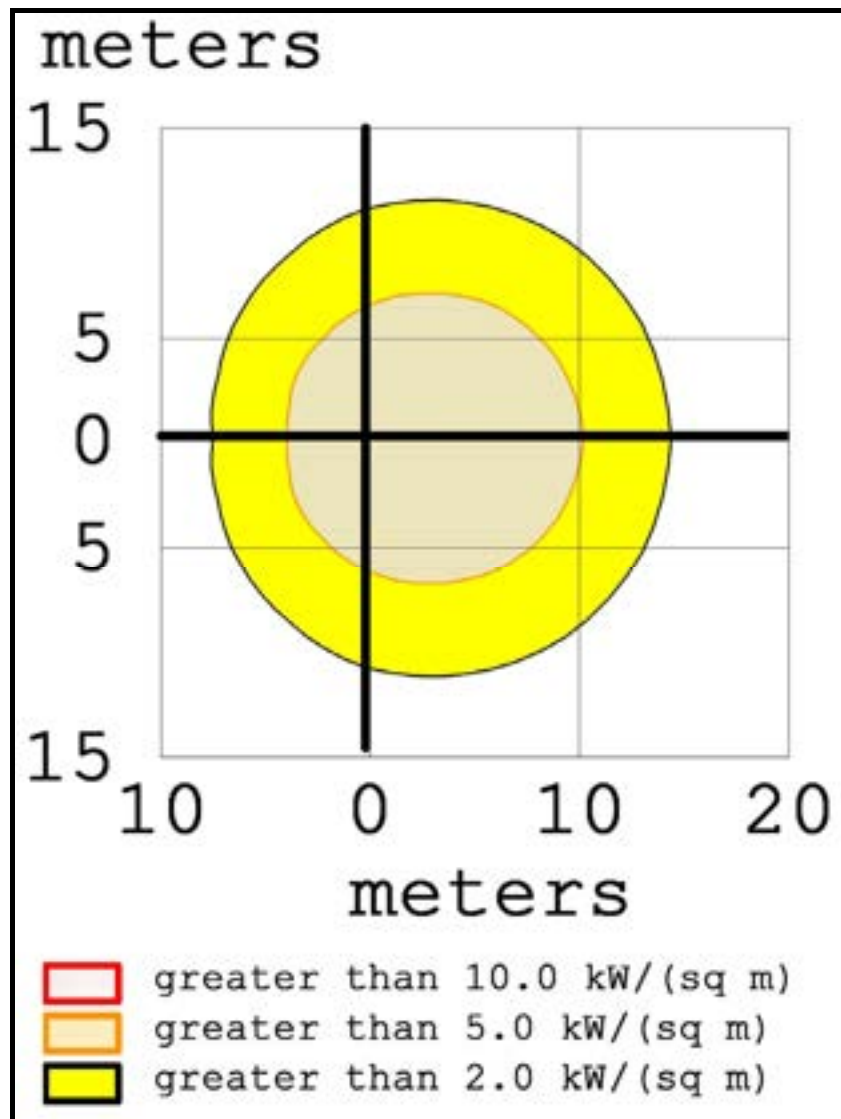
#### VAPOR CLOUD EXPLOSION

No explosion: no part of the cloud is above the LEL at any time.

POOL FIRE MODEL	
Burn Rate = 19.9 Kg/min	Flame Height = 7 meters.

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**THREAT MODELED:  
THERMAL RADIATION FROM POOL FIRE**



S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 10.0 KW/sq.m (potentially lethal within 60 sec).	< 10 meters.
2.	Distance to 5.0 KW/sq.m (2 <sup>nd</sup> degree burns within 60 sec).	10 meters.
3.	Distance to 2.0 KW/sq.m (pain within 60 sec).	15 meters.

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#### ACCIDENT SCENARIO NO. 4: ISO PROPYL ALCOHOL LEAK FROM BARREL.

CHEMICAL NAME: ISO PROPANOL.					
Mole Weight	60.1 g/mol	Ambient B.P.	82.1 °C	VP. at ambient temp	0.078 atm
PAC-1	400 ppm	PAC -2	400 ppm	PAC -3	2000 ppm
IDLH	2000 ppm	LEL	20000 ppm	UEL	127000ppm
Ambient Saturation Concentration: 78,143 ppm or 7.81%.					
SOURCE STRENGTH					
Maximum average sustained release rate = 1.6 Kg/min.					

#### ACCIDENT SCENARIO NO. 4.1

Flammable chemical escaping from barrel (not burning).

#### THREAT MODELED TOXIC AREA OF VAPOR CLOUD

##### THREAT ZONE

Red	PAC -3 12000 ppm	< 10 meters.
Orange	PAC -2 400 ppm	15 meters.
Yellow	PAC -1 400 ppm	15 meters.
	IDLH 2000 PPM	< 10 meters.

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

#### ACCIDENT SCENARIO NO. 4.2

Flammable chemical escaping from barrel (not burning).

#### THREAT MODELED FLAMMABLE AREA OF VAPOR CLOUD

##### THREAT ZONE

Red	12,000 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	2,000 ppm = 10% LEL.	< 10 meters.

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### ACCIDENT SCENARIO NO. 4.3

Flammable chemical escaping from barrel (not burning).

#### THREAT MODELED: OVER PRESSURE (BLAST FORCE)

#### VAPOR CLOUD EXPLOSION

No explosion: no part of the cloud is above the LEL at any time.

### ACCIDENT SCENARIO NO. 4.4

POOL FIRE MODEL	
Burn Rate = 7.07 Kg/min	Flame Height = 3 meters.

#### THREAT MODELED: POOL FIRE MODEL

S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 37.5 KW/M <sup>2</sup> (100 % Lethality).	< 10 meters.
2.	Distance to 12.5 KW/M <sup>2</sup> (1 % Lethality).	< 10 meters.
3.	Distance to 4.0 KW/M <sup>2</sup> (Emergency Action).	< 10 meters.

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### ACCIDENT SCENARIO NO. 5: METHANOL LEAK FROM BARREL.

CHEMICAL NAME: METHANOL.					
Mole Weight	32.04 g/mol	Ambient B.P.	64.7 °C	VP. at ambient temp	0.21 atm
ERPG-1	200 ppm	ERPG -2	1000 ppm	ERPG -3	5000 ppm
IDLH	6000 ppm	LEL	73000 ppm	UEL	360000ppm
Ambient Saturation Concentration: 215,431 ppm or 21.5 %.					
SOURCE STRENGTH					
Maximum average sustained release rate = 1.75 Kg/min. (hole of 1 cm diameter).					

### ACCIDENT SCENARIO NO. 5.1

Flammable chemical escaping from barrel (not burning).

#### THREAT MODELED TOXIC AREA OF VAPOR CLOUD

##### THREAT ZONE

Red	ERPG -3 5000 ppm	< 10 meters.
Orange	ERPG -2 1000 ppm	14 meters.
Yellow	ERPG -1 200 ppm	47 meters.
	IDLH 6000 PPM	< 10 meters.

Note: Threat zone was not drawn because effects of near-field patchiness make dispersion predictions less reliable for short distances.

### ACCIDENT SCENARIO NO. 5.2

Flammable chemical escaping from barrel (not burning).

#### THREAT MODELED FLAMMABLE AREA OF VAPOR CLOUD

##### THREAT ZONE

Red	43080 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	7180 ppm = 10% LEL.	< 10 meters.

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### ACCIDENT SCENARIO NO. 5.3

Flammable chemical escaping from barrel (not burning).

**THREAT MODELED: OVER PRESSURE (BLAST FORCE)  
VAPOR CLOUD EXPLOSION**

No explosion: no part of the cloud is above the LEL at any time.

### ACCIDENT SCENARIO NO. 5.4

POOL FIRE MODEL	
Burn Rate = 3.17 Kg/min	Flame Height = 2 meters.

**THREAT MODELED: POOL FIRE MODEL**

S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 37.5 KW/M <sup>2</sup> (100 % Lethality).	< 10 meters.
2.	Distance to 12.5 KW/M <sup>2</sup> (1 % Lethality).	< 10 meters.
3.	Distance to 4.0 KW/M <sup>2</sup> (Emergency Action).	< 10 meters.

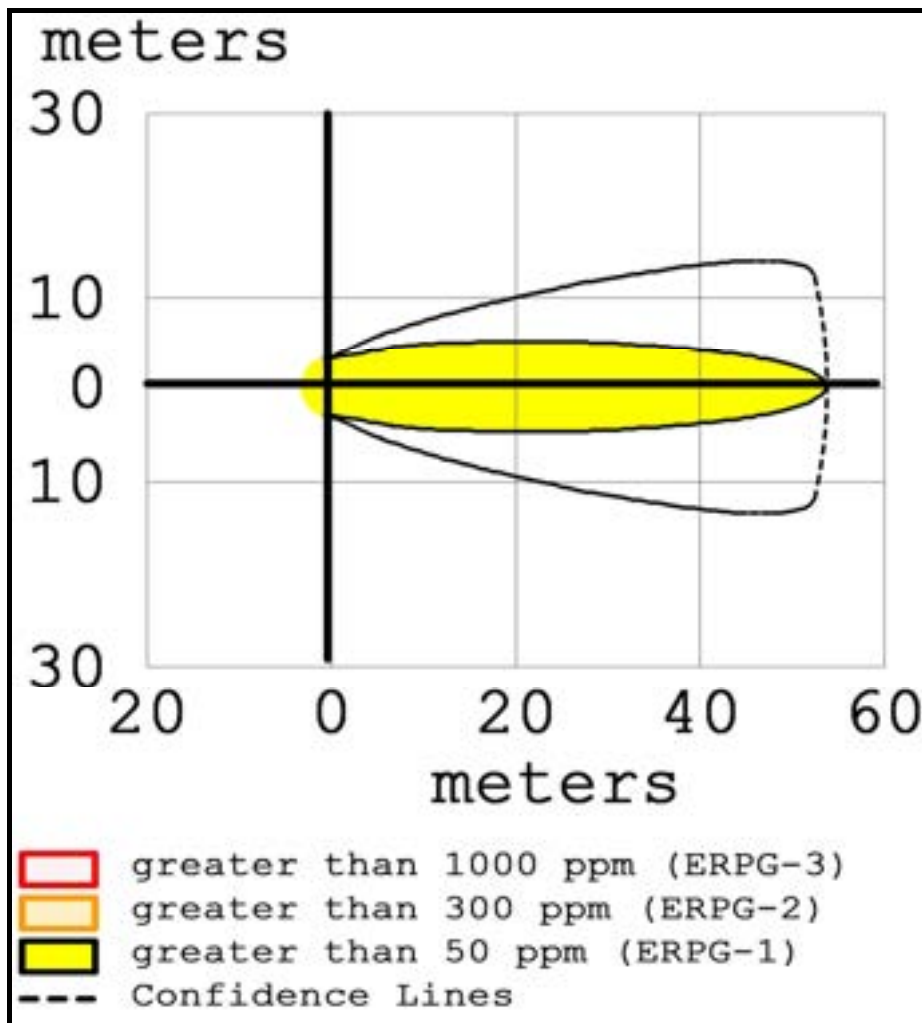
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### ACCIDENT SCENARIO NO. 6: TOLUENE LEAK FROM BARREL.

CHEMICAL NAME: TOLUENE.					
Mole Weight	92.14 g/mol	Ambient B.P.	110.5 °C	VP. at ambient temp	0.048atm
ERPG-1	50 ppm	ERPG -2	300 ppm	ERPG -3	1000 ppm
IDLH	500 ppm	LEL	12000ppm	UEL	71000ppm
Ambient Saturation Concentration: 48,470 ppm or 4.85%.					
SOURCE STRENGTH					
Sustained release rate 1.59 Kg/min.					

Model Run: Gaussian

#### THREAT MODELED: TOXIC AREA OF VAPOR CLOUD



#### THREAT ZONE

Red	ERPG -3 1000 ppm	< 10 meters.
Orange	ERPG -2 300 ppm	14 meters.
Yellow	ERPG -1 50 ppm	54 meters.
	IDLH 2000 ppm	< 10 meters.

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**THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD**

**THREAT ZONE**

Red	6600 ppm = 60% LEL = Flame Pockets.	< 10 meters.
Yellow	1100 ppm = 10% LEL.	< 10 meters.

**THREAT MODELED: OVER PRESSURE (BLAST FORCE)**

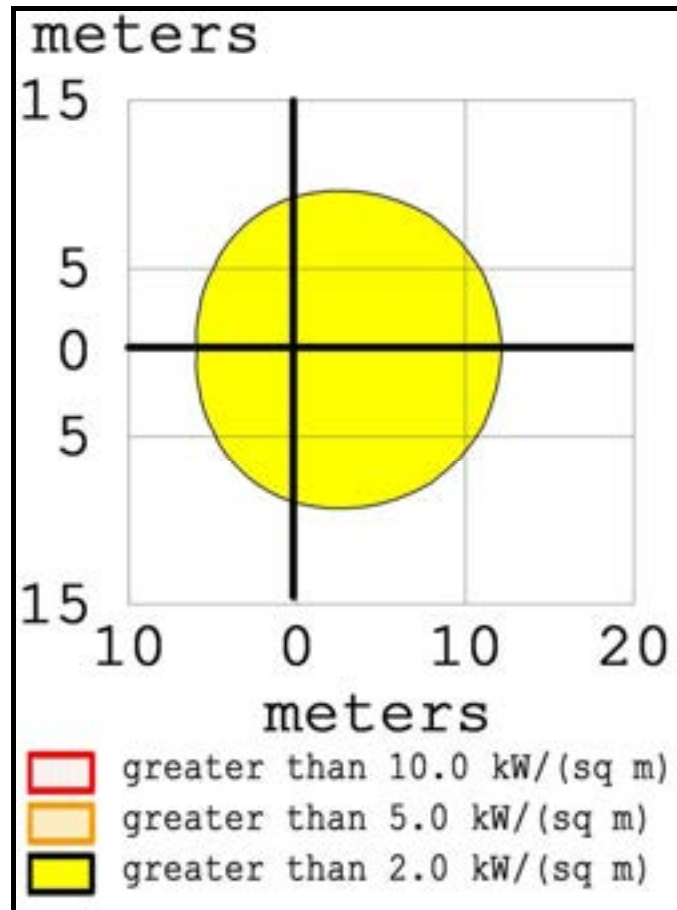
**VAPOR CLOUD EXPLOSION**

No explosion: no part of the cloud is above the LEL at any time.

POOL FIRE MODEL	
Burn Rate = 15.3 Kg/min	Flame Height = 6 meters.

**THREAT MODELED:**

**THERMAL RADIATION FROM POOL FIRE**



S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 10.0 KW/sq.m (potentially lethal within 60 sec).	< 10 meters.
2.	Distance to 5.0 KW/sq.m (2 <sup>nd</sup> degree burns within 60 sec).	< 10 meters.
3.	Distance to 2.0 KW/sq.m (pain within 60 sec).	12 meters.



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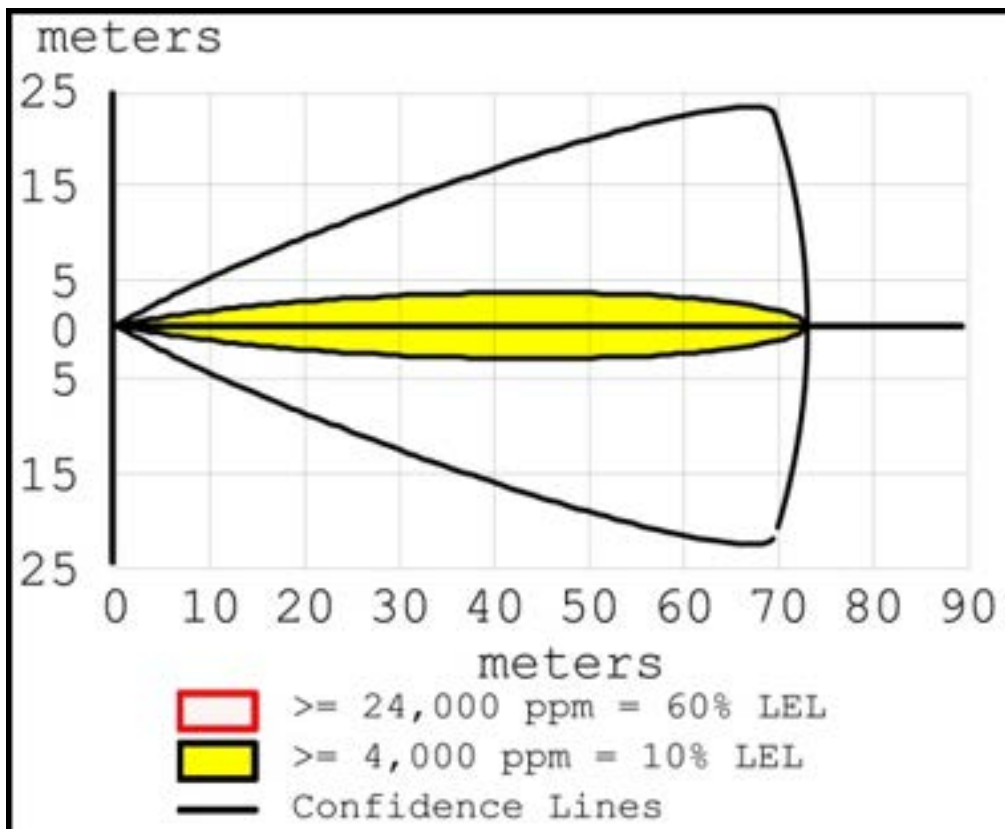
## ACCIDENT SCENARIO NO. 7: HYDROGEN RELEASE FROM PIPING .

CHEMICAL NAME: HYDROGEN.					
Mole Weight	2.02 g/mol	Ambient B.P.	- 252.8 °C	VP. at ambient temp	> 1 atm.
TEEL-1	145000 ppm	TEEL -2	280000 ppm	TEEL -3	500000ppm
LEL	40000 ppm	UEL	75000 ppm		
Ambient Saturation Concentration: 1,000,000 ppm or 100.0 %.					

### ACCIDENT SCENARIO NO. 7.1 (MCLS)

Hydrogen gas escaping from pipe (not burning), through pipe.

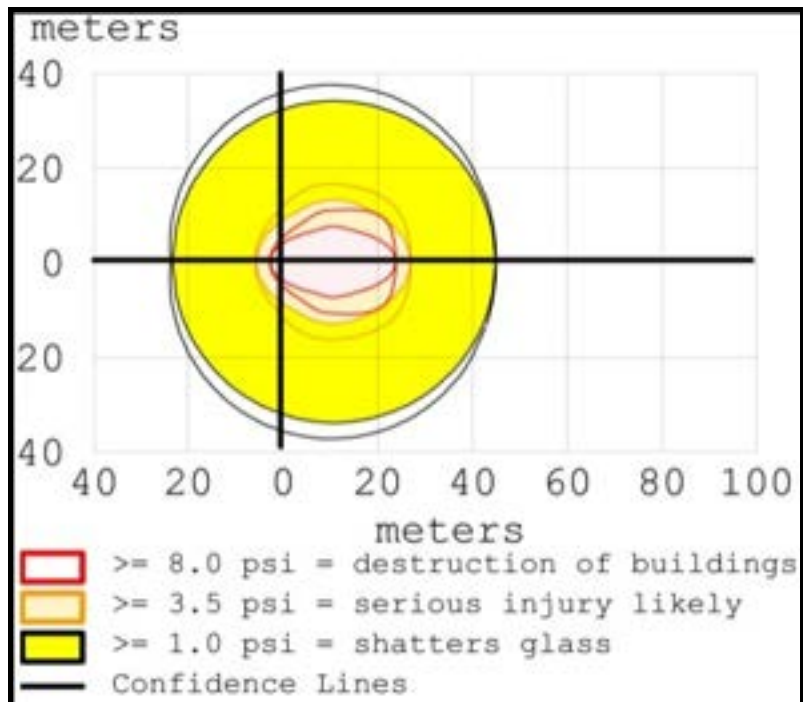
#### THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD



#### THREAT MODELED: FLAMMABLE AREA OF VAPOR CLOUD

Red	24,000 ppm = 60% LEL = Flame Pockets.	30 meters.
Yellow	4,000 ppm = 10% LEL.	73 meters.

**THREAT MODELED: OVER PRESSURE (BLAST FORCE)  
VAPOR CLOUD EXPLOSION**



**OVER PRESSURE (BLAST FORCE).**

Red.	8.0 psi: Destruction of buildings.	24 meters.
Orange.	3.5 psi: Serious injury likely.	27 meters.
Yellow.	1.0 psi: Shatters glass.	45 meters.

**ACCIDENT SCENARIO NO. 7.2**

Flammable gas is burning as it escapes from pipe.

**THREAT MODELED:  
JET FIRE MODEL**

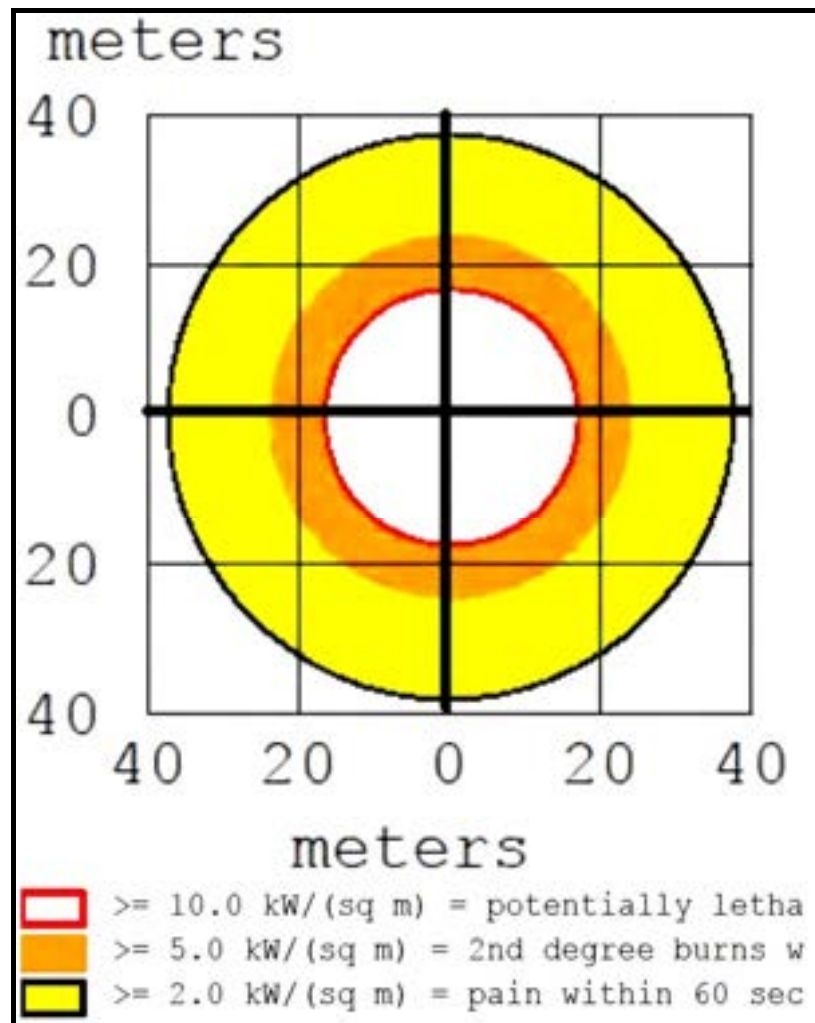
S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to 10.0 KW/m <sup>2</sup> (potentially lethal within 60 sec).	< 10 meters.
2.	Distance to 05.0 KW/m <sup>2</sup> (2 <sup>nd</sup> degree burns within 60 sec).	< 10 meters.
3.	Distance to 02.0 KW/m <sup>2</sup> (pain within 60 sec).	< 10 meters.

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### ACCIDENT SCENARIO NO. 8 (WORST POSSIBLE SCENARIO/ MCA).

Hydrogen cylinder rupture (involved in fire).

#### THREAT MODELED: FIRE BALL MODEL



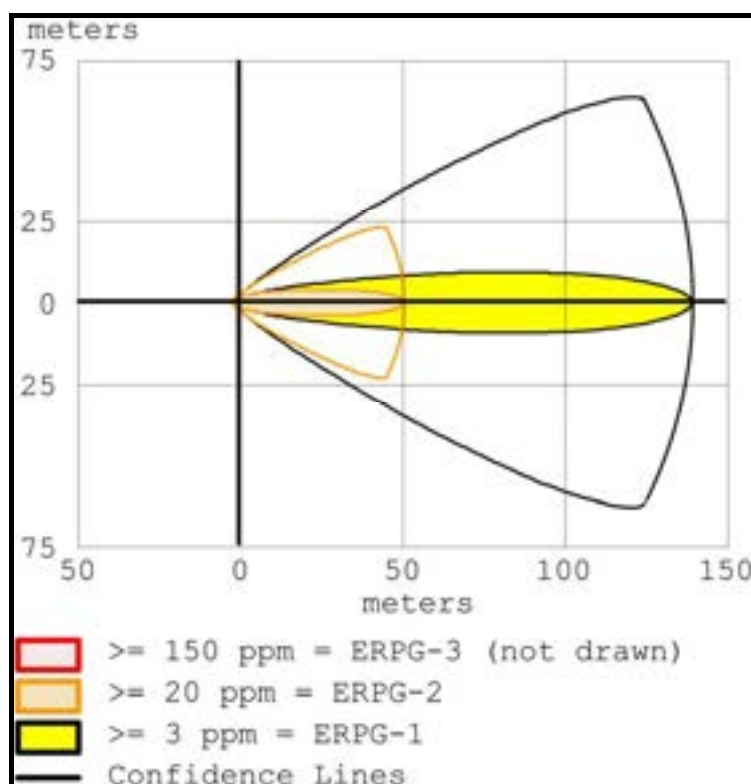
S. N.	THERMAL RADIATION LEVEL	EFFECT DISTANCE
1.	Distance to $10.0 \text{ KW}/\text{m}^2$ (potentially lethal within 60 sec).	18 meter.
2.	Distance to $05.0 \text{ KW}/\text{m}^2$ (2 <sup>nd</sup> degree burns within 60 sec).	25 meter.
3.	Distance to $02.0 \text{ KW}/\text{m}^2$ (pain within 60 sec).	38 meter.

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### ACCIDENT SCENARIO NO. 9: HYDROGEN CHLORIDE RELEASE FROM VENT.

CHEMICAL NAME: HYDROGEN CHLORIDE.					
Mole Weight	36.46 g/mol	Ambient B.P.	- 252.8 °C	VP. at ambient temp	-
ERPG-1	3 ppm	ERPG -2	20 ppm	ERPG -3	150 ppm
TEAL-1	3 ppm	ERPG -2	20 ppm	ERPG -3	150 ppm
AEGL-1 (60 min)	1.8 ppm	AEGL-2 (60 min)	22 ppm	AEGL-3 (60 min)	100 ppm
IDLH	50 ppm	PEL 5 ppm	-	UEL	-
Ambient Saturation Concentration: 27,679 ppm or 2.77%.					
Maximum average sustained release rate = 140 grams/min. (Refer product no. 2 LERCANIDIPINE Step I, Halogenation reaction using Thionyl Chloride as Halogenating agent).					

### THREAT MODELED: TOXIC AREA OF VAPOR CLOUD

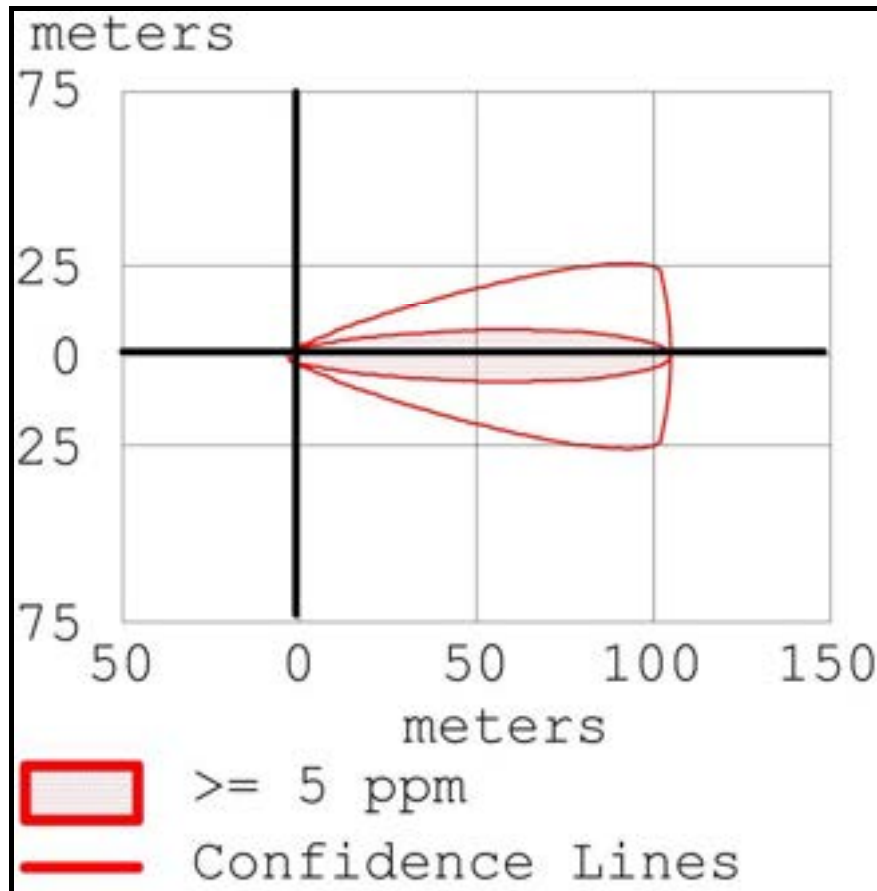


### TOXIC AREA OF VAPOR CLOUD

#### THREAT ZONE

Red	ERPG - 3 (150 ppm).	15 meters
Orange	ERPG - 2 (20 ppm).	51 meters
Yellow	ERPG - 1 (3 ppm).	139 meters

**THREAT MODELED:  
TOXIC AREA OF VAPOR CLOUD**



**TOXIC AREA OF VAPOR CLOUD**

Red	PEL (5 ppm).	105 meters.
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**EFFECT OF BLAST PRESSURE WAVE**

OVER PRESSURE (bar)	EFFECTS
0.01	Shattering of glass windows. Failure of panels.
0.03	Shattering of asbestos siding.
0.1	Collapse of steel framing panels.
0.3	Shearing of brick walls (8-12 inches).

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## EFFECT OF THERMAL RADIATION

RADIATION (KW/M <sup>2</sup> )	EFFECTS
4	Sufficient to cause pain to personnel.
6.4	Threshold for blister formation on bare skin.
11.8	Second-degree burn starts. 1% lethality. Sufficient for ignition of wood and melting the plastic.
28.2	Third degree burns. 50% lethality. Sufficient to cause damage to process equipment.

## POPULATION DISTRIBUTION IN THE SURROUNDINGS

S.N.	TOWN / VILLAGE	PERSONS	S.N.	TOWN / VILLAGE	PERSONS	S.N.	TOWN / VILLAGE	PERSONS
1.	Ambarnath (R)	3,623	23.	Dhoke (Dapivali)	343	45.	Pachon	63
2.	Ambeshiv Bk	1,390	24.	Done	1,841	46.	Padirpada	212
3.	Ambeshiv Kh	541	25.	Goregaon	1,141	47.	Pali	581
4.	Ambhe	967	26.	Gorpe	803	48.	Pimploli	1,348
5.	Asnoli	241	27.	Indgaon	602	49.	Posari	1,021
6.	Bandhanwadi	320	28.	Jambhale	547	50.	Rahatoli	1,203
7.	Bendshil	691	29.	Jambhilghar	468	51.	Sagaon	353
8.	Bhoj	627	30.	Kakadwal	1,525	52.	Sai	1,071
9.	Bohonoli	773	31.	Kakole	506	53.	Sape	29
10.	Burdul	807	32.	Kanhor	1,431	54.	Savare	1,088
11.	Chamtoli	872	33.	Karand	835	55.	Savaroli	245
12.	Chandap	462	34.	Karav	1,509	56.	Shil	460
13.	Chargaon	2,667	35.	Karavale Kh	805	57.	Shiravali	478
14.	Chinchavali	647	36.	Kasgaon	1,291	58.	Sonavale	361
15.	Chinchavali Bk	637	37.	Kharad	970	59.	Tan	40
16.	Chirad	459	38.	Kudsavare	816	60.	Umbroli	83
17.	Chon	957	39.	Kumbharli	389	61.	Usatane	1,151
18.	Dahivali	825	40.	Kushivali	749	62.	Vangani	8,193
19.	Dapivali	403	41.	Mangrul	1,805	63.	Varade	319
20.	Devaloli	357	42.	Mulgaon	1,638	64.	Wadi	2,669
21.	Dhavale	934	43.	Narhen	1,251	65.	Yeve	703
22.	Dhoke	742	44.	Nevali	1,871			

\*Ref: Census Abstract – 2011.

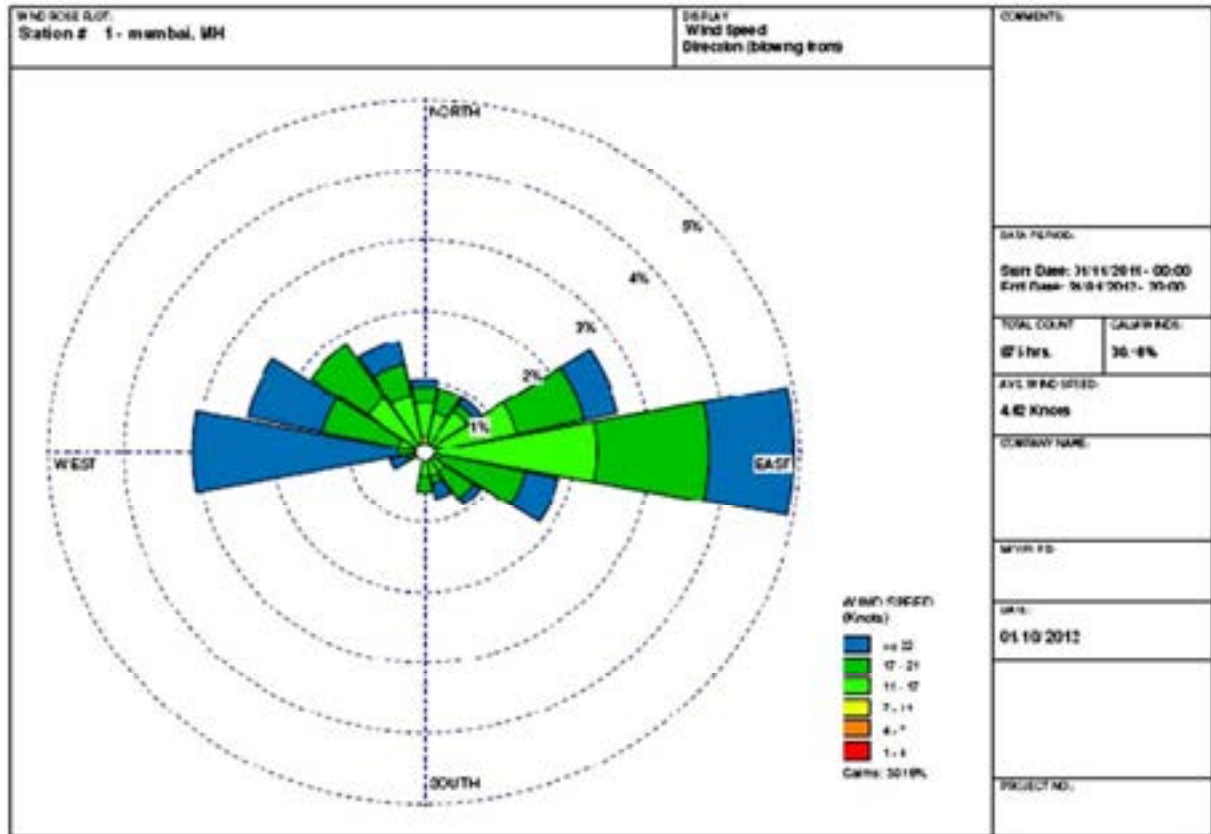
S.N.	TOWN / VILLAGE	NO OF HOUSEHOLDS	PERSONS	MALES	FEMALES
1.	Total	79,856	366,501	192,741	173,760
2.	Rural	12,752	64,749	33,557	31,192
3.	Urban	67,104	301,752	159,184	142,568

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## WIND DIRECTION SYSTEM

Predominant direction of wind is from South – West Side. At the site wind is likely to be the direction as follows;

### WIND ROSE



### NOTE:

#### 1. ATMOSPHERIC DATA

Wind	from West at 3 meters m/s	Stability Class	D	Cloud cover	5 tenth
No Inversion		Relative Humidity	50 %	Air temperature	30 °C

2. Consequences zones have been calculated using software ALOHA and also software based on the "TNO Yellow Book". Method for calculation of the Physical Effects of the escape of Dangerous Material (Liquid & Gases) Published by the Directorate General of Labour, Ministry of Social Affairs, Netherlands(1979).

3. Apart from the maximum credible releases, the conservative approach appears in adoption of atmospheric conditions, used in the dispersion calculation. In general, the assumptions/ conditions will result in the largest damage distances. Hence, it must be remembered that this analysis will be pessimistic & conservative in approach & is only a planning tool. Its use should not be extended without understanding its limitations.

#### 4. DISCLAIMER:

Information contained in this report 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 up to the manufacturer to ensure that the information contained in the report is relevant to the product manufactured/ handled or sold by him as the case may be. We make no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

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## SECTION 10: DETAILS OF SAFETY SYSTEMS

### 10(i) WARNING ALARM, SAFETY AND SECURITY SYSTEMS.

#### ALARM / SIREN

Siren located at the factory premises as marked on the site plan.

#### ALARM CODE

Fire	One continuous wailing sound of 30 seconds duration. Repeat after a minute.
Toxic Gas Release	Two interrupted wailing sounds of 15 seconds duration each with a gap of 30 seconds. Repeat twice after a minute gap.
Disaster	Three interrupted wailing sounds of 15 seconds duration each with a gap of 30 seconds. Repeat after a minute gap.
All Clear	Long whistle of one minute duration

#### TESTING OF ALARM

Every Saturday at 12.00 Noon one of the above alarms will be sounded for testing purpose.

On hearing alarm the incident controller will activate the action on Disaster control plan by giving proper instructions or predetermined signals.

### 10(ii) ALARM AND HAZARD CONTROL PLANS IN LINE DISASTER CONTROL AND HAZARD CONTROL PLANNING, ENSURING THE NECESSARY TECHNICAL AND ORGANISATIONAL PRECAUTIONS.

#### ASSEMBLY POINT

Assembly point as marked on SITE PLAN, is located farthest from the location of likely hazardous event.

LOCATION OF ASSEMBLY POINT	FOR PERSON
Near Main Gate (as marked on the site plan)	Persons from works.

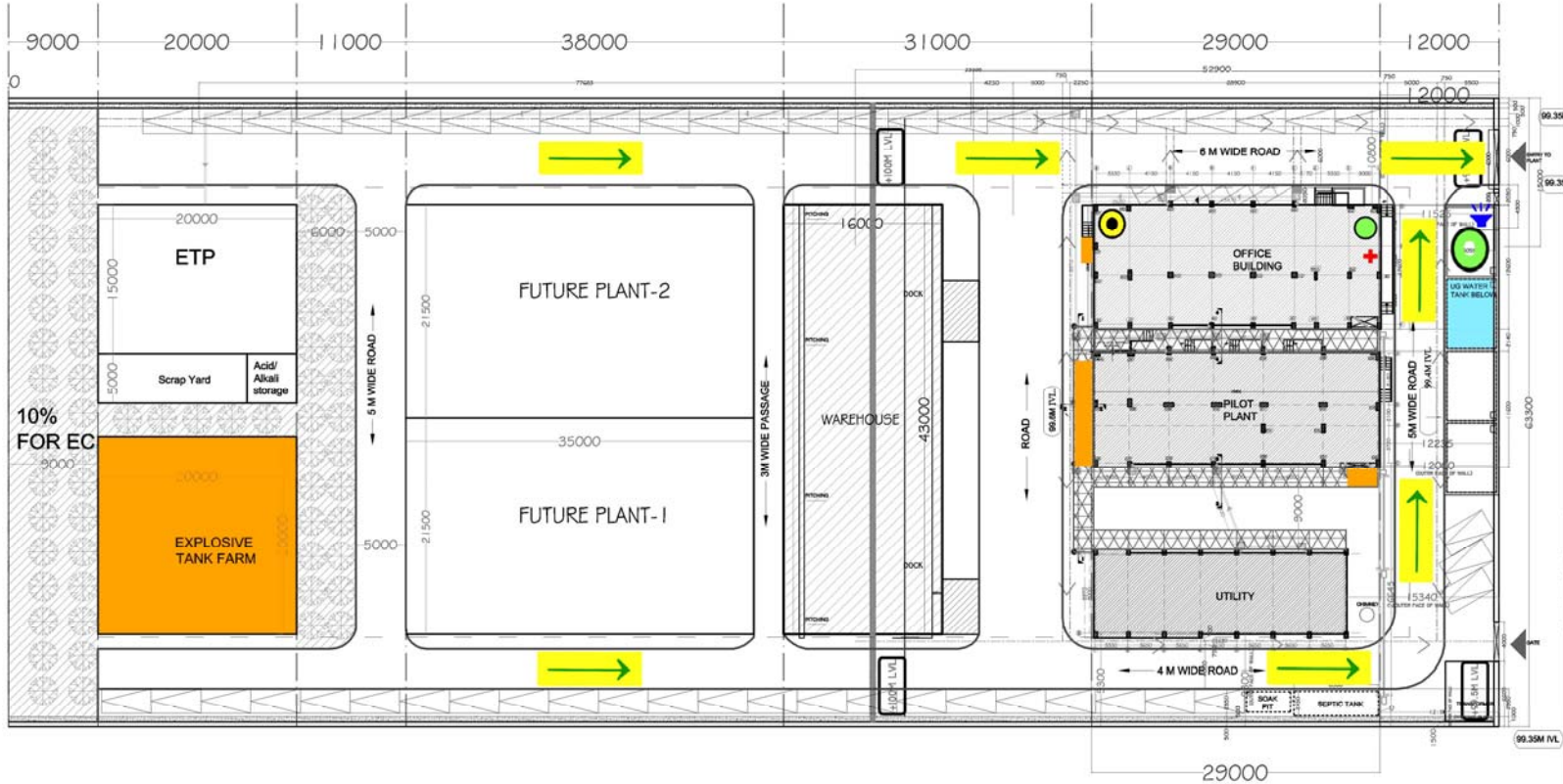




# ASolution Pharmaceuticals Pvt. Ltd.

PLOT NO. K – 3/8, ADDITIONAL AMBERNATH MIDC, ANAND NAGAR, AMBERNATH, MAHARASHTRA.

## SITE PLAN



- |  |                          |  |                |  |                     |  |   |
|--|--------------------------|--|----------------|--|---------------------|--|---|
|  | Siren                    |  | Assembly Point |  | First Aid           |  | Water Storage                                   |
|  | Emergency Control Centre |  | Escape Route   |  | Wind direction Sack |  | Hazardous Area Fire/Explosion/toxic gas release |

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## EVACUATION

If the incident is likely to affect people in the other plant area or environment outside the site. The Site Main Controller will intimate evacuation. Evacuation of the personnel to assembly area /or away from site ensuring proper head count.

- Accounting for site Personnel Visitors and Contractors, particularly those know to have been in the affected area.
- The evacuation is along the escape route leading to assembly point.
- People must be evacuated at right angle to wind or opposite the wind direction.
- Manpower employed of manufacturing activity is given in the following table:

SHIFT	TIMING	NO. OF EMPLOYEES		
		STAFF	WORKERS	TOTAL
General	09.00 TO 18.00	20	5	25
First shift	07.00 TO 15.00	7	0	7
Second shift	15.00 TO 23.00	7	0	7
Third shift	23.00 TO 07.00	5	0	5
<b>TOTAL</b>		<b>39</b>	<b>5</b>	<b>44</b>

\*persons are on contract basis additionally.

- Above table gives maximum number of persons available at site at any given time. It indicates that approximately maximum 39 number of persons at changeover between first and second shift and evacuation arrangement for same may be required in worst possible scenario.

## ESSENTIAL EMPLOYEES

In each shift there will be available some trained workers in fire fighting, use of gas masks, first aid. It will be a task force to assist and execute the instructions of The Site Incident Controller and The Site Main Controller.

Persons trained for fire fighting	:	50 %
Persons trained for first aid	:	5 %
Persons trained for plant operations	:	all

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## **REHEARSAL/ MOCK DRILL**

In disaster, management time is very important, the initial few minutes are critical and timely action may control the emergency. For persons to perform quickly their assigned roles, it is essential that each individual should be made aware of emergency rehearsals, which will impart procedures and their individual roles through proper training. It is necessary to test through necessary expertise to individuals to act quickly in case of a real emergency. This will help in identifying the deficiencies in the procedures and the likely difficulties, that may be encountered during implementation hence rehearsal of the plan will be undertaken at an interval of three months of work or when any new substance is introduced in the process or in the event of a serious accident taking place it will be reviewed and modified to the extent necessary.

## **REVISION**

“The Plan”, will be reviewed once in every calendar year and modified if necessary. In case of any change in the process of operations or methods.

## **SAFETY POLICY**

As a commitment towards safe working environment, the Management has formulated a safety policy and the same is displayed at prominent places at site.

## **HANDLING OF EMERGENCIES**

Emergency response procedure to handle the various emergencies.

### **1. Hazardous Chemicals.**

#### **1.1 FLAMMABLE SOLVENTS**

##### **SPILL**

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.
- No smoking, naked lights or ignition sources.
- Increase ventilation.

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- Stop leak if safe to do so.
- Water spray or fog may be used to disperse/ absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labeled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Do not use stream of water since it may spread fuel.

#### **FIRE**

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or watercourse direct to FWCP for eventual disposal afterwards.
- Use AFFF to blanket the spill area. (Aq. Film Forming Foam)
- Keep the tanks wet with water sprinkler.
- Use DCP as extinguisher media.
- Restrict access to area.
- Provide adequate protective equipment.

## 1.2 HSD

#### **SPILL**

- Removal of heat and flame.
- Stop or reduce discharge if it can be done safely.
- Contain material.
- Material should be recovered if possible or collected on absorbent materials.
- Prevent entry into water or sewer system.
- Notify appropriate authorities in the event of any significant release of this material into the environment.
- Use appropriate absorbents.
- CARE: Absorbent materials wetted with occluded oil must be moistened with water as they may auto-oxidize, become self heating and ignite. Some oils slowly oxidise when spread in a film and oil on cloths, mops, absorbents may autoxidise and generate heat, smolder, ignite and burn. In the workplace oily rags should be collected and immersed in water.

#### **FIRE**

- Do not use stream of water since it may spread fuel.
- Use AFFF to blanket the spill area. (Aq. Film Forming Foam)
- Keep the tanks wet with water sprinkler.
- Use DCP as extinguisher media.
- Restrict access to area.
- Provide adequate protective equipment.

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### 1.3 ACIDS (NITRIC ACID)

#### SPILL

- Ventilate area of leak or spill.
- Wear appropriate personal protective equipment
- Keep unnecessary and unprotected personnel from entering.
- Contain and recover liquid when possible.
- Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust.
- Do not flush to sewer

### 1.4 ALKALI (CAUSTIC SODA)

#### SPILL

- Cordon off the area of spillage and prevent Crowding.
- Using PPE's controls and isolate the spill.
- Wash the surface with excess of water and soap. Sweep and collect without making dust (incase of solids) seal all waste in vapour tight plastic bags for eventual disposal.

## 2. Fire/ Explosion In Nearby Company.

#### ACTION REQUIREMENT

1. Training of all employees regarding the safe actions conditions required dos and don'ts in case of emergency from nearer company to mitigate the hazards due to an emergency.
2. Stoppage of material transfer, sprays of water on flammable material containing tanks.
3. Controlling of exothermic reactions, stopping of loading and unloading of flammable material.
4. Information to all key people regarding an emergency.
5. Verify the emergency preparedness for possible emergency.

## 3. Heavy Rainfall/ Flooding.

#### ACTION REQUIREMENT

1. Planning for all storage, process controlling equipments and parameters considering the possibility of heavy rainfall and flooding.
2. Training of all employees regarding dos and don'ts in case of heavy rainfall and flooding.

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3. Storage of material in good – leak proof storage area, which would not be affected due to heavy rainfall and the flooding, it must not be at low laying area so that water currents can enter into the storage.
4. Water reactive, acidic – alkaline and toxic material should be stored by extreme care.
5. Compatibility study should be considered while identifying the areas for storage of all materials.
6. Containment must be provided to all tanks and shut off valves to be provided to the storm water drain at various locations.
7. Provision to lift the contaminated water into the ETP from storm water drain.
8. Adequate quantity of Hydrochloric Acid and Caustic should be available in ETP to take care of neutralization of acidic/ alkaline water received in ETP.
9. Life jackets should b made available for use in emergency.

#### **4. Gas Leak From Near By Company.**

##### **ACTION REQUIREMENT**

1. Training of all employees regarding the safe actions conditions required dos and don'ts in case of emergency from nearer company to mitigate the hazards due to an emergency.
2. Stoppage of material transfer, loading and unloading.
3. Actions to shutdown the plant according to process control, verification of gas characteristics and wind direction, be ready for evacuation by nearest and safest route with possible PPE even with wet handkerchief to scrub the gas if you don't get the gas mask at the time.

#### **5. Evacuation.**

Evacuation is required during Mock Drill, fire emergency, toxic/ explosive vapor release, earth quake or bomb treat.

##### **ACTION REQUIREMENT**

1. All personnel shall stop their area/ equipment, material transfer, loading and unloading,
2. Carry out emergency shut down procedure and evacuate. However, if stopping the Stoppage of area/ equipment, can not be done within

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reasonable time, leave area and inform area in-charge/ Site Incident Controller.

3. All personnel shall evacuate through emergency exit routes with possible PPE (even with wet handkerchief to scrub the gas if you don't get the gas mask at the time), and assemble at Assembly Points.
4. Wind socks have been installed at various locations at the plant to check the wind direction.
5. Do not run, walk fast, do not create panic.
6. All vehicles shall be stopped at site and no vehicle shall leave site unless authorized by emergency controller. Drivers need to assure safe way and careful for other employees evacuating in hurry. While evacuating take visitors, and physically challenged personnel along.
7. Report respective supervisor/ roll call leader at assembly point. Inform site incident controller the authentic information related to incident or any personnel trapped inside (from the digital counting meter at Emergency Control Centre).
8. If have role in emergency control teams, report Emergency Control Centre.
9. After emergency controller declares all clear, reenter the plant.

Note: If assemble point is affected by incident use alternate assembly point/ outside location as declared by site main controller.

## 6. **Civil Criminal Or Terrorism Disturbances.**

Disturbances the site may be subjected to range from vandalism, labour problems, public displeasure with company policy, external civil/ terrorism disturbances.

### **ACTION REQUIREMENT**

Minor disturbances and acts of localised vandalism:

- Alert Security.
- Encourage employees and neighbors to alert Security promptly of any suspicious persons in the area.
- Repair any building damage promptly, (broken windows, boundary wall).
- Heighten security level and screening.
- Remove all chemical tanker from outside road in front of plant and take them to safe place.
- Heighten security level.
- It may be necessary to Notify the police.

Major disturbances which threaten life and property;

- Report to the police and consult the Corporate Crisis team.
- Make the utilities and fire protection equipment as safe as possible.



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- Heighten security level to lock and control all entry points to the site.
- Secure work areas.
- Remove all chemical tanker from outside road in front of plant and take them to safe place.
- Organise to reinforce security strength and increase fence surveillance.

## 7. Odor Complaint.

### ACTION REQUIREMENT

1. In the case of an odor complaint it is the responsibility of the person taking the call (or in the case of an internal complaint the complainant) to initiate the incident report that is necessary for all odor complaints. As much information as possible is to be included on this form.
2. The production shall investigate the odor when they are informed of the complaint.
3. If the source of the odor is found, immediate action is to be taken to eliminate.
4. The odor. If the source can not be found it may be deemed necessary to call the EHS. Manager/ Production Manager.
5. Reporting Procedure to Adjacent Neighbors;
  - Identify yourself.
  - Obtain & record name of person receiving call & time of call.
  - Give incident description (short & simple) & advise on necessary action they might take for precaution.
6. If known, offer the following information;
  - Time incident started.
  - Brief description of incident.
  - Materials involved.
  - Current status of incident.
  - When incident is expected to over.
  - Potential impact on neighbor & if evacuation is necessary.

## 8. Earthquake.

### ACTION REQUIREMENT

The duration of an earthquake is likely to be short & action during the earthquake should be self protection. Avoid windows or areas where objects above you can fall.

During an earthquake.

- Stay indoors & take cover under a deck or in a doorway.
- If outdoors, get into an open area away from buildings or over head structures.
- If driving, pull over & stop in an area clear of buildings or overhead structures. Stay in the vehicle.



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When the earthquake stops.

- Remain in the same position for several minutes in preparation for after shocks.
  - Check for injuries. Render first aid.
- Check for damage or fires.

If the damage is severe.

- The first consideration should be for the safety & accountability of people. Communications with civil authorities and services will probably be limited and plant personnel will have to handle conditions in the plant for several hours before outside help can be obtained.
- It is possible that power and water services will be cut off and fires may have to be contained using fire extinguishers only.
- Evacuate to the assembly area.
- Keep non emergency personnel out of the plant and buildings until the damage has been evaluated.
- Await instructions from the Emergency controller.

Employee Response.

- Persons working in office area are exposed to hazard of false ceiling falling down. They can take shelter under heavy furniture e.g. tables from protecting them from falling false ceiling.
- Personnel are not supposed to stand or walk near walls and glass windows.
- Do not stand near pylons around building.
- Objects mounted on walls and lights are weak points may fall during earthquake. Do not stand or walk near them. Choose evacuation route in such a way that these can be avoided.

Emergency Controller.

- Ensure head count after evacuation/ earth quake.
- Identify list of personnel trapped.
- Inside, if any and form and send teams inside for rescue.
- Ensure first aid is provided.
- Form various teams e.g. fire fighters, first aiders, assessment etc. and maintain the records of personnel sent inside.
- Assessment of office prior to declare reentry.

## 9. Transport Related Incidents.

### ACTION REQUIREMENT

If an accident resulting in the spill of hazardous materials occurs near the site, the site.

If an accident resulting in the spill of hazardous materials occurs near the site.

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Fires, explosions or any unplanned sudden or non -sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

- The site Emergency controller shall be contacted promptly to initiate immediate action that may be necessary before the authorities can respond. These actions should include;
- Notifying the Fire Department & Police.
- Limiting Damage - Efforts should be limited to protecting property and the evacuation of personnel.
- Eliminating ignition sources located downwind if the material released is flammable.
- Off site emergency response procedures is separately dealt in Transport emergency manual/ TREM card instructions
- Refer compatibility of hazardous waste chart.

#### **11. External Grass Fire.**

During festive season/ Summer season.

- Organise to reinforce security strength and increase fence surveillance during festive season and Summer season.
- Attend fire fighting.

#### **12. Epidemic.**

- Containment of the disease by reducing spread within the site.
- Maintenance of essential services if containment is not possible.

#### **10(iii) RELIABLE MEASURING INSTRUMENTS, CONTROL UNITS AND SERVICING OF SUCH EQUIPMENTS**

- Oxygen meter,
- Explosivemeter, &
- Instrument calibration system provided.

#### **10(iv) PRECAUTIONS IN DESIGNING OF THE FOUNDATION AND LOAD BEARING PARTS OF THE BUILDING**

Stability certificates for the buildings maintained.

#### **10(v) CONTINUOUS SURVEILLANCE OF OPERATIONS**

Qualified and experienced supervisors

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## 10(vi) MAINTENANCE AND REPAIR WORK

(According to the generally recognised rules of good engineering practices)

Following safety systems (Preventive) are in use:

- Safety inspections,
- Preventive maintenance program,
- Work permit system, &
- Work area air monitoring.

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## SECTION 11: DETAILS OF FACILITIES

### 11.1 DETAILS OF COMMUNICATION FACILITIES AVAILABLE DURING EMERGENCY AND THOSE REQUIRED FOR AN OFF - SITE EMERGENCY.

#### 11.1.1 EMERGENCY SERVICES

##### POLICE

SR. NO.	POLICE STATION	CODE	PHONE NO.
1.	Ambarnath – Police Station.	0251	2682310/ 2683330. 268310/383, 2682330.
2.	Police Commissioner Thane.	022	25442121.
3.	Police Control Room.	022	25342784.
4.	ACP.	0251	2682940.
5.	Kalyan – Police.	0251	2314167/ 2313428/ 2314800.
6.	Civil Defense – Kalyan.	0251	2317578/ 2320106.
7.	RTO, Thane.	022	25340473.

##### FIRE BRIGADE

SR. NO.	POLICE STATION	CODE	PHONE NO.
1.	Century Rayon	0251	2733670.
2.	Ambarnath.	0251	268400/ 2682409/ 2682400.
3.	Ulhasnagar.	0251	2553171/ 2546931/ 2553151.
4.	Kalyan.	0251	2315101/ 2320101.
5.	Dombivali.	0251	2470357.

##### MEDICAL ASSISTANCE (HOSPITALS)

SR. NO.	POLICE STATION	CODE	PHONE NO.
1.	Ashwini Hospital.	0251	2603588.
2.	Shabha Hospital.	0251	2608502.
3.	Chhaya Hospital.	0251	2682337.
4.	Kaingar Hospital.	0251	2701222.
5.	ESIC Hospital.	0251	2706733.

##### MEDICAL ASSISTANCE (AMBULANCE)

SR. NO.	POLICE STATION	CODE	PHONE NO.
1.	Ambarnath – Ambulance.	0251	2682337/ 2686133/2682363.
2.	Kalyan – Ambulance.	0251	2315102/ 2310202.
3.	Century Hospital.	0251	2735462.

##### WATER SUPPLY

SR. NO.	POLICE STATION	CODE	PHONE NO.
1.	MIDC Office.	0251	2621342/ 2610988.

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### 11.1.2 ADMINISTRATION/ REGULATORY AGENCIES

SR. NO.	AUTHORITY	CODE	PHONE NO.
1.	District Collector, Thane.	022	25344041.
2.	Dy. Director Ind. Safety & Health, Kalyan.	0251	2207042.
3.	Jt. Director, Industrial Safety & Health, Kalyan.	Mobile	9922220259.
4.	Director Ind. Safety & Health, Commerce Centre, Fifth Floor, Tardeo, Mumbai – 400 034.	022	23515477/ 23512231.
5.	Labour Commissioner.	0251	2313453.
6.	MPCB Chairman.	022	24010437.
7.	Maharashtra Pollution Control Board, Kalyan.	0251	2310212/ 2310212.
8.	Maharashtra Pollution Control Board, Thane.	022	25321256.
9.	Maharashtra Pollution Control Board, Mumbai.	022	24020781/24014701 / 24010706.
10.	Maharashtra Pollution Control Board, New Mumbai.	022	27572739.
11.	Maharashtra Pollution Control Board, Kalyan (SRO).	0251	2310212/ 2310222.
12.	KAMA Office.	0251	2470657/ 452241.

### 11.1.3 KEY PERSONNEL CONTACT PHONE NUMBERS

SR. NO.	NAME	DESIGNATION	MOBILE NO.
1.	Dr. Nandkumar Chodankar.	Occupier.	
2.	Mr. Sandip Kurkure.	Project In Charge.	9821014703.

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## 11.2 DETAILS OF FIRE FIGHTING AND OTHER FACILITIES AVAILABLE AND THOSE REQUIRED FOR AN OFF - SITE EMERGENCY

### 11.2.1 FIRE EXTINGUISHER

Fire extinguishers for emergency, located at strategic positions at each process plant, storage areas, security office etc. The same are easily accessible, marked properly and maintained regularly. Following types of Fire Extinguishers are provided.

- Carbon Dioxide (CO<sub>2</sub>).
- Dry Chemical Powder (DCP).
- Foam.

### 11.2.2 FIRE HYDRANT SYSTEM

#### FIRE WATER RESERVOIR

#### FIRE WATER PUMPS

- Start-up-method: Fire engines to start automatically at low water pressure in firewater ring header.
- Diesel Engines can also be started manually from the local panel failing which the machines should be started manually with the help of the handle kept for the purpose.

#### FIRE HYDRANTS

- Single Headed Hydrants (S.H.).
- Monitors.

#### FIRE HOSE BOXES AND FIRE HOSES

#### DG SET FOR EMERGENCY POWER

#### FIRE FIGHTING TRAINED PERSONS

Fire fighting training imparted to employees covering each department.

#### FIRE TENDER

Fire tender is available at fire station in MIDC.

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### 11.3 DETAILS OF FIRST AID AND HOSPITAL SERVICES AVAILABLE AND ITS ADEQUACY

#### FIRST AID

Four numbers fully equipped First Aid boxes located at Laboratories and Security.

#### LIST OF THE PERSONS TRAINED IN FIRST AID

First aid training imparted to 5 % employees covering each department.

#### COMPANY DOCTOR

A part time factory medical officer visits regularly for medical services and available for emergency medical services.

#### HOSPITALS

There is adequate arrangement with local hospitals for any Medical emergency and Ambulance.

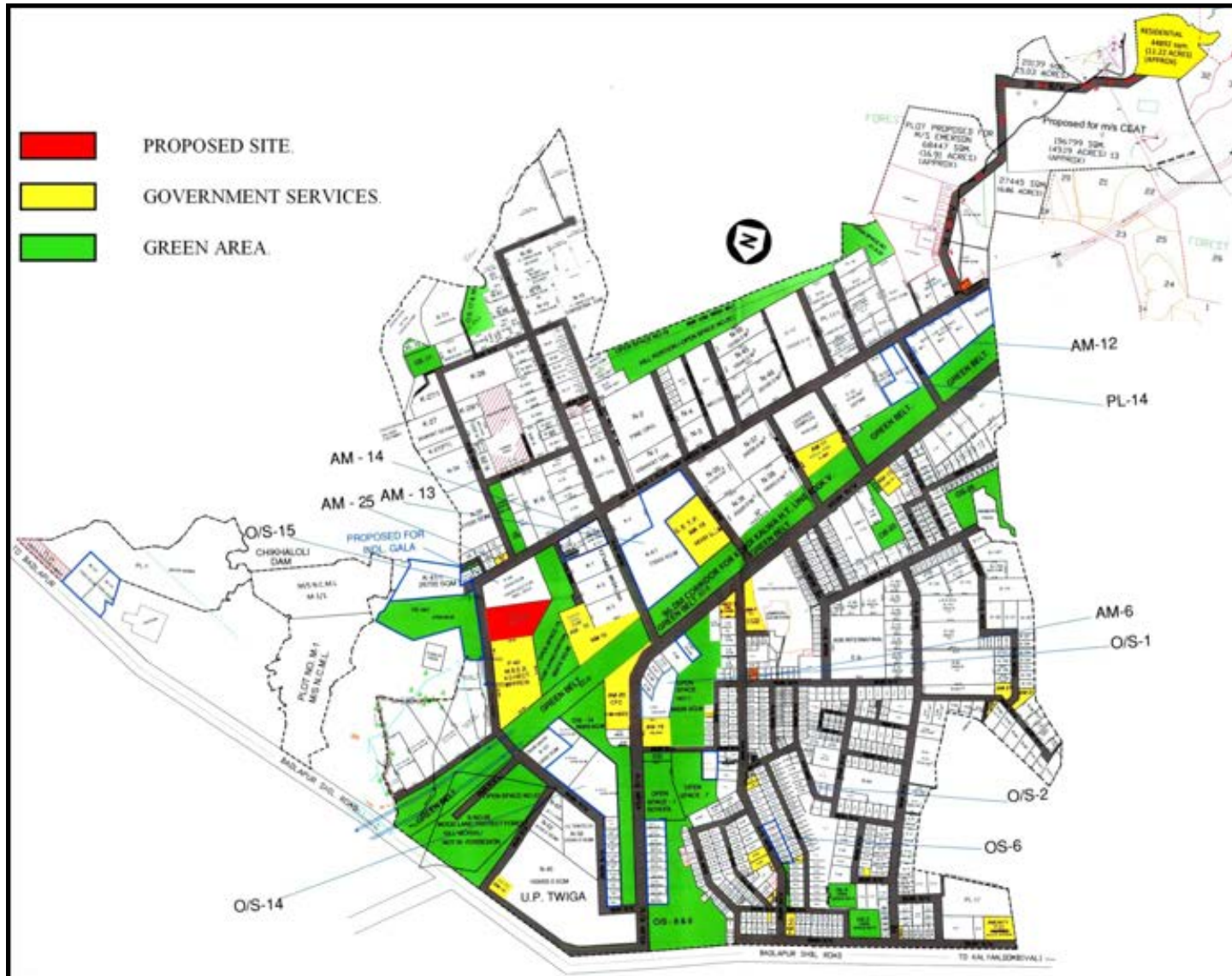
S. N.	HOSPITAL	CODE	PHONE
1.	Ashwini Hospital.	0251	2603588.
2.	Shabha Hospital.	0251	2608502.
3.	Chhaya Hospital.	0251	2682337.
4.	Kaingar Hospital.	0251	2701222.
5.	ESIC Hospital.	0251	2706733.

#### ANTIDOTES

Antidotes are available with company doctor.

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## ANNEXURE 1: SITE SURROUNDING





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## ANNEXURE 2: MATERIAL SAFETY DATA SHEETS

SR. NO.	NAME	NUMBER OF PAGES
1.	Acetone.	17
2.	Ethyl Acetate.	16
3.	Hexane.	20
4.	Hydrochloric Acid.	17
5.	Hydrogen.	13
6.	Iso Propyl Alcohol.	16
7.	Methanol.	17
8.	Toluene.	19

**MSDS in 16 Sections format maintained separately.**

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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 up to 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. We make no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

**Annexure-VII**  
**Form 7**



**DR. RANJEET KALE**

**FORM NO. 7**

(See Rule 18 (7) and schedules II, III, IV, VI, VIII, X, XI, XIII, XIV, XV, XVII, XVIII and XX Rule 114) [Prescribed under Rule 18(7)] No. 7

**HEALTH REGISTER**

From:	01.06.2023
To:	31.05.2024

[ In respect of persons employed in occupations declared to be dangerous operations under section 87 ]

Note: (i) Column 8- Detailed summary of reason for transfer or discharge should be stated.

(ii) Column 11- Should be expressed as Fit/ Unfit/ suspended.

**COMPANY NAME - ASolution Pharmaceuticals Pvt. Ltd.**

Address: K-3/8 Additional Ambernath MIDC, Next to MSETCL, Power Substation, Thakurpada, Ambernath (E) Thane-421 506.

Sr. No.	TEST NO.	Employee No.	Name Of Employee	AGE (Last Birth day)	SEX	Date of employment of present work	Date of leaving or transfer to other	Reason for leaving transfer discharge	Nature Of Job Or occupation	Raw material or by product handled	Date Of examination	Result Of medical examination	If suspended state period with reason	Rectified fit to resume duty On with sign of certifying surgeon	If certificate of unfitness or suspension issued To	Signature with date of certifying surgeon
27	27	-	DR ASHOTOSH DIKSHIT	61	MALE	NA	NA	NA	Q.A	NA	01.06.2023	FIT FOR JOB				
28	28	2022	VIKAS PATIL	43	MALE	NA	NA	NA	MANUFACTURING	NA	01.06.2023	FIT FOR JOB				
29	29	2034	SAGAR PANDURANG CHAWAN	47	MALE	NA	NA	NA	MANUFACTURING	NA	01.06.2023	FIT FOR JOB				
30	30	2324	AJAY BAGELE	29	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
31	31	2355	SANTOASH JAGTAP	45	MALE	NA	NA	NA	Q.C	NA	01.06.2023	FIT FOR JOB				
32	32	2389	MADHURA AHER	23	FEMALE	NA	NA	NA	MICROBIOLOGY	NA	01.06.2023	FIT FOR JOB				
33	33	2436	NEHA BHALRAV	30	FEMALE	NA	NA	NA	MICROBIOLOGY	NA	01.06.2023	FIT FOR JOB				
34	34	2005	MAHESH M SHELAR	48	MALE	NA	NA	NA	WAREHOUSE	NA	01.06.2023	FIT FOR JOB				
35	35	2115	GANESH A MUSALE	37	MALE	NA	NA	NA	ENGINEERING	NA	01.06.2023	FIT FOR JOB				
36	36	2012	VISHWAJEET THAKORE	58	MALE	NA	NA	NA	WAREHOUSE	NA	01.06.2023	FIT FOR JOB				
37	37	2277	KETAN M ADAWADE	29	MALE	NA	NA	NA	ENGINEERING	NA	01.06.2023	FIT FOR JOB				
38	38	2343	MANAV S MHATRE	22	MALE	NA	NA	NA	ENGINEERING	NA	01.06.2023	FIT FOR JOB				
39	39	2173	ANIKET S GVJARE	43	MALE	NA	NA	NA	APL	NA	01.06.2023	FIT FOR JOB				
40	40	2438	RAKESH R MORE	39	MALE	NA	NA	NA	MICROBIOLOGY	NA	01.06.2023	FIT FOR JOB				
41	41	2299	SANJEEV BIRADAR	34	MALE	NA	NA	NA	HR & ADMIN	NA	01.06.2023	FIT FOR JOB				
42	42	2035	PRAVIN DESAI	47	MALE	NA	NA	NA	MANUFACTURING	NA	01.06.2023	FIT FOR JOB				
43	43	2286	PRASHANT A SURVE	51	MALE	NA	NA	NA	ADL	NA	01.06.2023	FIT FOR JOB				
44	44	2100	PRAKASH KADAM	51	MALE	NA	NA	NA	REGULATORY AFFAIRS	NA	01.06.2023	FIT FOR JOB				
45	45	2001	SANDEEP KUNKURE	52	MALE	NA	NA	NA	-	NA	01.06.2023	FIT FOR JOB				
46	46	-	HEMANT KADAM	54	MALE	NA	NA	NA	S.C.M	NA	01.06.2023	FIT FOR JOB				
47	47	2388	DR SARITA GAWAS	37	FEMALE	NA	NA	NA	R.A	NA	01.06.2023	FIT FOR JOB				
48	48	2291	DHYANESHWAR PHULE	35	MALE	NA	NA	NA	WAREHOUSE	NA	01.06.2023	FIT FOR JOB				
49	49	-	BABARAO PATIL	27	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
50	50	2437	SAMEER SAWANT	32	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
51	51	2057	HEMANT KHAMKAR	44	MALE	NA	NA	NA	Q.C	NA	01.06.2023	FIT FOR JOB				
52	52	-	DR LAXMI N CHODANKAR	70	FEMALE	NA	NA	NA	DRIVER	NA	01.06.2023	FIT FOR JOB				

डॉ. रणजीत काले  
मनिकुण्ड प्रमाणित रसायनकारिक  
जी.सु. ५ नारायण, अणु विभाग  
ACS31-RK/2012



**DR. RANJEET KALE**

**FORM NO. 7**

(See Rule 18 (7) and schedules II, III, IV, VI, VIII, X, XI, XII, XIV, XV, XVII, XVIII and XX Rule 114) [Prescribed under Rule 18(7)] No. 7

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**COMPANY NAME -ASolution Pharmaceuticals Pvt. Ltd.**

Address:K-3/8 Additional Ambarnath MIDC,Next to MSETCL ,Power Substation,Thakurpada, Ambarnath (E) Thane-421 506.

Sr. No.	TEST NO.	Employee No.	Name Of Employee	AGE (Last Birth day)	SEX	Date of employment of present work	Date of leaving or transfer to other	Reason for leaving transfer discharge	Nature Of job Or occupation	Raw material or by product handled	Date Of examination	Result Of medical examination	If suspended state peroid with reason	Rectified fit to resume duty On with sign of certifying surgeon	If certificate of unfitness or suspension issued To	Signature with date of certifying surgeon
53	53	-	DR NANDKUMAR CHODANKAR	74	MALE	NA	NA	NA	C.E.O.	NA	01.06.2023	FIT FOR JOB				
54	54	2370	JAGDISH UGHADE	30	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
55	55	2372	KRUSHNA BHAGYAWANT	26	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
56	56	-	NILESH PAWAR	43	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
57	57	-	JAYVANT SHINPI	27	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
58	58	2326	KESHAV PADARE	33	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
59	59	2323	SAGAR JADHAV	30	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
60	60	2414	PRASANNA NAKATI	24	MALE	NA	NA	NA	QUALITY CONTROL	NA	01.06.2023	FIT FOR JOB				
61	61	2345	SAJAN JADHAV	30	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
62	62	2354	VIKAS WARE	32	MALE	NA	NA	NA	MAINTENANCE ENGG.	NA	01.06.2023	FIT FOR JOB				
63	63	2402	SAMADHAN PATIL	40	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
64	64	2081	UMESH GURAV	35	MALE	NA	NA	NA	PRODUCTION	NA	01.06.2023	FIT FOR JOB				
65	65	2245	RAJENDRA H JAISWAR	48	MALE	NA	NA	NA	EXECUTIVE	NA	01.06.2023	FIT FOR JOB				
66	66	2430	AKASH PATIL	26	MALE	NA	NA	NA	R&D	NA	01.06.2023	FIT FOR JOB				
67	67	2029	KRIPASHANKAR YADAV	42	MALE	NA	NA	NA	PRODUCTION	NA	14.06.2023	FIT FOR JOB				
68	68	2251	DAYAL PATIL	41	MALE	NA	NA	NA	PRODUCTION	NA	14.06.2023	FIT FOR JOB				
69	69	2261	GANESH GOVARDHANE	32	MALE	NA	NA	NA	ENGINEERING	NA	14.06.2023	FIT FOR JOB				
70	70	2008	VIKAS NALAWADE	44	MALE	NA	NA	NA	ENGINEERING	NA	14.06.2023	FIT FOR JOB				
71	71	2418	ASMITA KHADE	23	FEMALE	NA	NA	NA	QUALITY CONTROL	NA	14.06.2023	FIT FOR JOB				
72	72	2445	HARSHALI PATADE	24	FEMALE	NA	NA	NA	QUALITY CONTROL	NA	14.06.2023	FIT FOR JOB				
73	73	2127	CHETAN SOPARKAR	46	FEMALE	NA	NA	NA	ANALYTICAL DEP	NA	14.06.2023	FIT FOR JOB				
74	74	2288	DEEPAK AHER	35	MALE	NA	NA	NA	QUALITY CONTROL	NA	14.06.2023	FIT FOR JOB				
75	75	2356	SANDIP AWARI	45	MALE	NA	NA	NA	PRODUCTION	NA	14.06.2023	FIT FOR JOB				

डॉ. रणजीत काळे  
आरोग्य विभागाचे सहायक निदेशक  
आ.स. व. अ.स.म. अ.स. विभाग  
A/2024/PK/2012

# **Annexure-VIII**

## **Form 4**



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## Form 4

See rules 6(5),13(8),16(6) and 20(2) of Hazardous and other wastes 2016

### FORM FOR FILING ANNUAL RETURNS

[ To be submitted to state pollution control board/pollution control committee by 30th June of every year for the preceeding period April to march]

**Unique Application Number:** MPCB-HW\_ANNUAL\_RETURN-0000043529  
**Submitted On:** 13-05-2024  
**Industry Type :** Generator  
**Submitted for Year:** 2024

**1. Name of the generator/operator of facility** ASolution Pharmaceuticals Private Limited  
**Address of the unit/facility** k-3/8, Additional Ambernath MIDC, Ambernath East

**1b. Authorization Number** 0000058051/CO-2001000219  
**Date of issue** Jan 4, 2020  
**Date of validity of consent** Oct 31, 2024

**2. Name of the authorised person** Sandeep Kurkure  
**Full address of authorised person** k-3/8, Additional Ambernath MIDC, Ambernath E

**Telephone** 9821014703  
**Fax** 02222881289  
**Email** sandeep@asolution.in

#### 3. Production during the year (product wise), wherever applicable

Product Type *	Product Name *	Consented Quantity	Actual Quantity	UOM
Pharmaceuticals(excluding formulation)	Propofol	7000.0000	336	Kg
Pharmaceuticals(excluding formulation)	Nitrofurantoin	66000.0000	365.8	Kg
Pharmaceuticals(excluding formulation)	S + Ibuprofen	6000.0000	1050	Kg
Pharmaceuticals(excluding formulation)	Trimethyl sulfoxonium chloride	66000.0000	5420	Kg
Pharmaceuticals(excluding formulation)	Efonidipine hydrochloride	27000.0000	409.5	Kg
Pharmaceuticals(excluding formulation)	Sulfametrole	66000.0000	1132.5	Kg
Pharmaceuticals(excluding formulation)	Sugammadex Sodium	500.0000	55.5	Kg
Pharmaceuticals(excluding formulation)	Palmitoyl Ethanol Amide	6000.0000	2030	Kg
Pharmaceuticals(excluding formulation)	Palmitoyl Ethanol Amide	6000.0000	2030	Kg

### PART A: To be filled by hazardous waste generators

#### 1. Total Quantity of waste generated category wise

Type of hazardous waste	Wate Name	Consented Quantity	Quantity	UOM
28.1 Process Residue and wastes	Spent Carbon	10.000	9.232	MTA
28.4 Off specification products	off specification product	0.500	0	MTA
35.3 Chemical sludge from waste water treatment	Chemical sludge	2.500	1.39	MTA
37.3 Concentration or evaporation residues	Evaporation residue	210.000	2.3	MTA

#### 2. Quantity dispatched category wise.

Type of Waste	Quantity of waste	UOM	Dispatched to	Facility Name
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28.1 Process Residue and wastes	9.232	MTA	Disposal Facility	Mumbai waste management
28.4 Off specification products	0	MTA	Disposal Facility	Mumbai waste management
35.3 Chemical sludge from waste water treatment	1.39	MTA	Disposal Facility	Mumbai waste management
37.3 Concentration or evaporation residues	2.3	MTA	Disposal Facility	Mumbai waste management

### 3. Quantity Utilised in-house,If any

<b>Type of Waste</b>	<b>Name of Waste</b>	<b>Quantity of Waste</b>	<b>UOM</b>
	NA	0	KL/Anum

### 4. Quantity in storage at the end of the year

<b>Type of Waste</b>	<b>Name of Waste</b>	<b>Quantity of Waste</b>	<b>UOM</b>
28.1 Process Residue and wastes	Process Residue	0.1	MTA
35.3 Chemical sludge from waste water treatment	Chemical sludge	0.2	MTA
37.3 Concentration or evaporation residues	Concentration residue	0	MTA
28.4 Off specification products			KL/Anum

### 5. Quantity disposed in landfills as such and after treatment

<b>Type</b>	<b>Quantity</b>	<b>UOM</b>
Direct landfilling	NA	KL/Anum
Landfill after treatment	NA	KL/Anum

### 6. Quantity incinerated (if applicable)

<b>UOM</b>
NA

## PART B: To be filled bt Treatment,storage, and disposal facility operators

	<b>UOM</b>	<b>State Name</b>
1.Total Quantity received	KL/Anum	
2. Quantity in stock at the beginning of the year	<b>UOM</b> KL/Anum	
3. Quantity treated	<b>UOM</b> KL/Anum	
4. Quantity disposed in landfills as such and after treatment		
<b>Type</b>	<b>Quantity</b>	<b>UOM</b>
Direct landfilling	NA	KL/Anum
Landfill after treatment	NA	KL/Anum
5. Quantity incinerated (if applicable)	<b>UOM</b>	
NA	KL/Anum	
6. Quantiry processed other than specified above	<b>UOM</b> KL/Anum	
7. Quantity in storage at the end of the year.	<b>UOM</b> KL/Anum	



## PART C: To be filled by recyclers or co-processors or other users

1. Quantity of waste received during the year

<b>Waste Name/Category</b>	<b>Country Name</b>	<b>State Name</b>	<b>Quantity of waste received from domestic sources ( Inside India )</b>	<b>Quantity of waste imported(If any)</b>	<b>Units</b>
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2. Quantity in stock at the beginning of the year

<b>Waste Name/Category</b>	<b>Quantity</b>	<b>UOM</b>
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3. Quantity of waste recycled or co-processed or used

<b>Name of Waste</b>	<b>Type of Waste</b>	<b>Quantity</b>	<b>UOM</b>
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4. Quantity of products dispatched (wherever applicable)

<b>Name of product</b>	<b>Quantity</b>	<b>UOM</b>
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5. Total quantity of waste generated

<b>Waste name/category</b>	<b>quantity</b>	<b>UOM</b>
----------------------------	-----------------	------------

6. Total quantity of waste disposed

<b>Waste name/category</b>	<b>quantity</b>	<b>UOM</b>
----------------------------	-----------------	------------

7. Total quantity of waste re-exported (If Applicable)

<b>Waste name/category</b>	<b>quantity</b>	<b>UOM</b>
----------------------------	-----------------	------------

8. Quantity in storage at the end of the year

<b>Waste name/category</b>	<b>quantity</b>	<b>UOM</b>
----------------------------	-----------------	------------

9. Quantity disposed in landfills as such and after treatment

<b>Type</b>	<b>Quantity</b>	<b>UOM</b>
Direct landfilling	NA	KL/Anum

Landfill after treatment	NA	KL/Anum
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10. Quantity incinerated (if applicable)

<b>UOM</b>	
NA	KL/Anum

Personal Details

<b>Place</b>	<b>Date</b>	<b>Designation</b>
Ambernath	2024-05-13	Factory Manager

**Annexure-IX**  
**CHWTSDF Certificate**



Sustainability

**Mumbai Waste Management Limited**  
**CERTIFICATE OF MEMBERSHIP**

M/s. A Solution Pharmaceuticals Pvt. Ltd.

*is a registered member of  
CHW-TSDF at MIDC - Taloja for  
safe and secure disposal of  
Hazardous waste.*

**Membership No: MWML-HZW - AMB - 3202**

***This Certificate is valid up to 31<sup>st</sup> March 2024***

Onkar Kulkarni  
Manager - BMD

Somnath Malgar  
Director

**Annexure-X**  
**Mock drill Report**

## ASOLUTION PHARMACEUTICALS PVT. LTD. - AMBERNATH

Annexure # 02	MOCK DRILL REPORT		
Date of Mock Drill	27/12/2023		
Type of emergency	Fire <u>Spillage</u> / <u>Fall Down</u> / Gas Leakage / Other <u>NA</u> (encircle the correct option)		
Location of emergency	Near MSGLR101, 1st floor, Manufacturing Plant.		
Drill Start Time:	15:40	Drill End Time:	16:40m
		Total Time of Drill:	01.0 hrs
Name of Mock Drill Observer	Mr. Sagar Chavan		
Name of Emergency discoverer	Mr. Jagdish Ughate.		
Names of Security Department personnel	Mr. Nandlal Yadav		
Name of Emergency Commander	Mr. Sandeep Kurkure		
Name of Emergency Controller	Mr. M.B. Patil		
Name of Incident Controller	Mr. Pravin Desai		
Names Fire Fighting Team members	Mr. Vikas Nalawde Mr. Ganesh Gowardane Mr. Nitin Patil Mrs. Pramila Aaher.		
Names of Search and Rescue Team	Mr. Vikas Patil Mr. Mahesh Shelav Mr. Swapnil		
Names of First Aid Team	Mr. Amit Yadav Mr. Sandip Pingale Mr. Vishwajeet Thakore Mrs. Prashali Patil		
Name of Administration department In charge	Mr. Sandeep Kurkure		
Brief scenario of Emergency: - There was spillage of solvent from on floor due to leakage from drum, Because of that Mr. Samuelhan slipped and fall down on floor and got injury to the left leg.			
Format No: A010201007F02R00			Page 1 of 2

Annexure # 02

## MOCK DRILL REPORT

## Observed deficiencies:

Few people used hoist (Lift) to go down while evaluation and go into assembly point.

## Proposed corrective actions for observed deficiencies:

Improve awareness of people by giving training.

## Area needs to be improve:

Awareness of people to use PPE

## Training needs to be given to:

- ① Training to use PPE
- ② Evacuation procedure training.

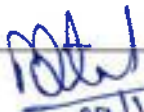
## Positive Note:

- ① First aid team handled the situation properly.
- ② Everyone given proper response to mock drill activity.
- ③ Everyone (Except 2-3 person) followed the emergency procedure properly.

## Recommendations :

Training regarding use of PPE needs to be given.

EHS Manager:  
(Name, Sign. and Date)

  
27/12/2023  
M. B. Patil

## ASOLUTION PHARMACEUTICALS PVT. LTD. - AMBERNATH

Annexure # 01	<b>MOCK DRILL RECORD</b>
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<b>Date of Mock Drill</b>	27/12/2023		
<b>Name of Mock Drill Observer</b>	Ms. Sagor P. Chauhan		
<b>Type of emergency</b>	Fire <u>Spillage</u> <u>Fall Down</u> Gas Leakage / Other <u>n/a.</u> <i>(encircle the correct option)</i>		
<b>Location of emergency</b>	9 <sup>th</sup> floor, near MSGLR101		
<b>Drill Start Time:</b>	15:40	<b>Drill End Time:</b>	16:40
		<b>Total Time of Drill:</b>	1 hr
<b>Timing of Mock Drill activities (fill the applicable)</b>			
<b>Activity</b>	<b>Time</b>	<b>Remark (if any)</b>	
Emergency discovery person called at	15:42		
Emergency Alarm given at	15:43		
Evacuation started at	15:48		
Evacuation completed at	15:53		
Roll call (head count) started at	15:54		
Roll call (head count) completed at	15:59		
ERT member arrived at incident spot	15:48		
Fire fighting started at	NA	not required	
Fire fighting completed at	NA	not required.	
Search and Rescue started at	15:50		
Search and Rescue completed at	15:55		
ERT member left the incident spot at	15:58		
First Aid treatment started at	16:00		
First Aid treatment completed at	16:15		
Ambulance called at	NA	not required	
Ambulance reached to factory at	NA	not required	
Ambulance reached to Hospital at	NA	not required.	
Final roll call started at	16:20		
Final roll call completed at	16:25		
All Clear siren given at	16:45		



Annexure # 01	<b>MOCK DRILL RECORD</b>
---------------	--------------------------

<b>Mock Drill Observation</b>	
<b>Communication</b> (encircle the correct option, where applicable)	
Is Assigned person discovering emergency informed properly	<input checked="" type="radio"/> Yes / No
Is Security person heard the emergency properly	<input checked="" type="radio"/> Yes / No
Was Phone line is engage	Yes <input checked="" type="radio"/> No
Is Security Supervisor will operate the emergency siren properly	<input checked="" type="radio"/> Yes / No
Is Emergency siren blown properly	<input checked="" type="radio"/> Yes / No
Is Emergency siren heard at all areas	<input checked="" type="radio"/> Yes / No
Mention the areas where emergency siren not heard properly: <i>NA</i>	
Communication during Evacuation	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Communication of Security with Emergency Response and Evacuation Team (ERT)	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Communication of Emergency Commander with Emergency Response and Evacuation Team (ERT)	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Communication and coordination of ERT team members during Emergency handling	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Communication during roll calls	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Communication for Ambulance	<i>(NA)</i> Satisfactory / Not Satisfactory
Briefing of Emergency Controller before All Clear	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Is All Clear siren blown properly	<input checked="" type="radio"/> Yes / No
<b>Alertness of emergency</b>	
Response of Personnel after declaration of Emergency	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
After hearing the emergency siren is all equipment and machineries stopped properly	<input checked="" type="radio"/> Yes / No
Mention the equipment and machineries not stopped properly: <i>None</i>	
Name of the person who not stopped the equipment and machineries properly: <i>NA.</i>	
<b>Evacuation</b>	
Total number of person before evacuation	<i>10</i>
Total number of person evacuated	<i>10</i>



ASOLUTION PHARMACEUTICALS PVT. LTD. - AMBERNATH

Annexure # 01	<b>MOCK DRILL RECORD</b>
---------------	--------------------------

Total time required for evacuation	About 5mins
Is evacuation done through escape root properly	<input checked="" type="radio"/> Yes / No
Names of the person who not followed the escape root: <span style="float: right;">NA.</span>	
Is Evacuation route free from obstacles	<input checked="" type="radio"/> Yes / No
Is Evacuation done properly	<input checked="" type="radio"/> Yes / No
Is all shift in-charge / department in-charge get attendance board along with them	<input checked="" type="radio"/> Yes / No
Name of the person who not get the attendance board: <span style="float: right;">* NA none</span>	
Is attendance board filled correctly	<input checked="" type="radio"/> Yes / No
Name of the person who not filled attendance board correctly:	
<b>Evaluation of ERT Team members Responsibility</b>	
Performance of Emergency discoverer	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Security Department	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Emergency Commander	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Emergency Controller	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Incident Controller	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Fire Fighting Team	NA Satisfactory / Not Satisfactory
Performance of Search and Rescue Team	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of First Aid Team	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Administration department	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
Performance of Employees, contract workers	<input checked="" type="radio"/> Satisfactory / Not Satisfactory
<b>Evaluation fire-fighting installations and equipment</b>	
Is fire-fighting installations start immediately	not required Yes / No
Is fire-fighting installations works properly	not required Yes / No
Deficiencies observed during fire-fighting installations operation: <span style="float: right;">NA.</span>	
Is fire-fighting equipment are available at their designated location	<input checked="" type="radio"/> Yes / No
Mention the location where fighting equipment are not available: <span style="float: right;">NA</span>	
Is fire-fighting equipment works properly	not required Yes / No

\*  
Jumun  
24/11/2023



ASOLUTION PHARMACEUTICALS PVT. LTD. - AMBERNATH

Annexure # 01

MOCK DRILL RECORD

Deficiencies observed during fire-fighting equipment operation: *NA.*

Deficiencies observed in Mock Drill plan, training, personnel or equipment:

*During evacuation it is observed that some person operate lift to rescue.*

Mock Drill Observer:  
(Name, Sign. and Date)

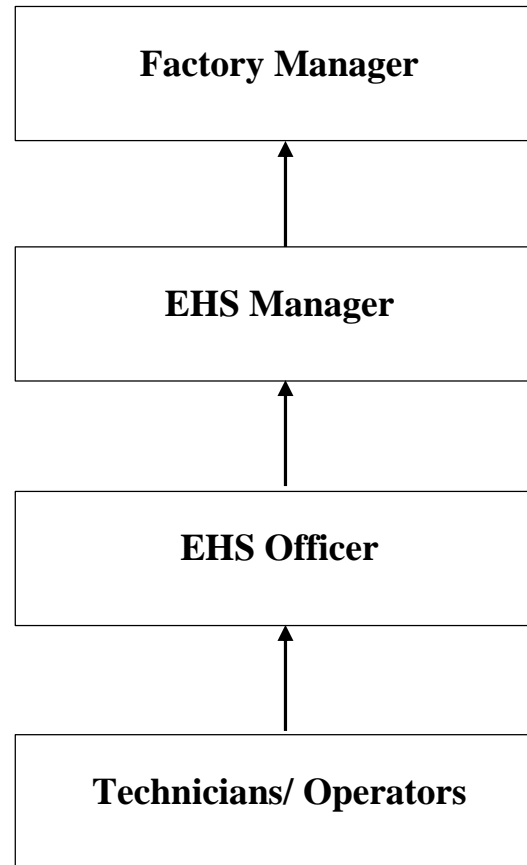
*Sagar P. Chavhan*  
*Jum*  
*27/12/2023*



**Annexure-XI**  
**Environment Management Cell**

# ASOLUTION

**Environment Health and Safety Organisation Asolution Pharmaceuticals Pvt. Ltd**



## **Annexure-XII**

### **Newspaper Advertisement regarding EC**



Health and Wellness

सोरायसिस व पांढ-या डागांवर प्रभावी उपचार!!! (सल्ला व मार्गदर्शन)

प्रत्येक रुग्णांचे व्हिडीओ रेकॉर्डिंग ठेवले जाते. वरून लावण्यासाठी कोणत्याही प्रकारची औषधे / मलम / तेल यांचा वापर नाही.

माने मेडिकल फौंडेशन मुंबई: दादर कार बिल्डिंग, ३६६, ए.एन.सी. केळकर रोड, पानेरी रुकान रोजारी, तिरुपती कलेक्शन, दुसरा मजला, दादर(प.) २८.

Galleria

पत्रिकेशिवाय तुमच्या समस्या सांगणार! आश्चर्यचकित व्हाल! विश्वास बसल्यासच रु.690/- फीमध्ये कुटुंबातील सर्वांचे प्रश्न विचारा! (पत्रिकावाचनदेखील)

श्री.मनोज शंदिन्य (दादासाहेब) अभिजीत गुरव (पुणे) : दादासाहेबांनी दिलेले उपाय लागू पडले, काम झाले. २ महिन्यात लग्न जमले, याशिवाय इतर गोष्टीही फरक पडला.

जीवन मार्गदर्शन! होय तुमचे आयुष्य बदलू शकते... नेहमीच अपयश... कोणत्याच कामात यश नाही... आपण प्रामाणिकपणे व नियमित मेहनत करत आहात तर मग यश का मिळत नाही?...

Health and Wellness

सुडौल शरीर सुंदर चेहरा आंतरराष्ट्रीय क्लिनिक • जागतिक उपचार पध्दती

टाइम्स क्लासिफाइड्स

बातमी आपल्या कामाची™

डिटेटिव्ह सर्विसेस सॅवी लेडी डिटेटिव्ह. नवरा / मुलगा, बायको ऑफिसला जाताना कि आणखीण कुठे !

घरगुती सेवा वृद्धसेवा/वृद्धाश्रम डॉक्टरांचे सार्विकर वृद्धाश्रम वृद्ध, बेडरिडन, पंगलिसिस,

पेस्ट कंट्रोल मरुटी विश्वासार्थी सरकारीमान्य 'नॅलप' 300/- पासून झुळे, स्पे.वासरीहत डेक्यू, बाळवी, मुंबई-28229351

वैयक्तिक सेवा विनायकराजा ज्योतिष ठाणे (वेस्ट) एकतासात समाधान-विवाह, सोननास, शत्रुघोडा, गृहकलेश, लवप्रब्लेम, वशीकरण

फिल्मविषयक 'प्रवेश कर' फिल्म लाईन मध्ये ADS, फिल्म्स, सिरीयल च्या मार्फत त्वरित पाहिजेत लहान मुले, मुली, पुरुष, महिला.

मॉडेलिंग / टेलरिंग / फेशन फ्रेशर्स सर्व वयातील मुले/मुली, लहान मुले 'प्रवेश कर' ADS, फिल्म्स, सिरीयल, प्रिंट मॉडलिंग

Real Estate जागा उपलब्ध FOR SALE WEST INDIA मध्य मुंबई

Shopping Mart

VENUS VENUS EVENTS NATIONAL EXPO. प्रदर्शन आणि विक्री

INSTASCUPT Figure | Face | Hair

भारत सरकार द्वारा सम्मानित चिकित्सा संस्थान ज्वाईटस पेन् क्लिनिक

सुवईवाहेर सल्लागार-जवळ-हायवे-क्रमांक 222 पासून 2 कि. मी. अंतरावर सायल येथे ओपन बंगला प्लॉट, 235 रु स्वैअर फूट दराने उपलब्ध.

पुणे पुणे FOR SALE- DEVELOPED NA PLOTS @ DAPOLI KOLTHARE NEAR BEACH CALL NKDC

पुणे नाशिक नाशिक महानगर पालिका हद्दीस लागून NA फायनल प्लॉटस त्वरीत विकणे. 60 ते 255 वार (लगेच खरेदी) एजंट शमस्य. Mo - 9822336033.

मालमत्ता PLOTS AND LAND PLOTS FOR SALE

Tenders & Notices पब्लिक नोटीस

पर्यावरण विषयक पर्यावरण आणी मेरस अंतोप्राशन फार्मास्युटीकलस प्रायव्हेट लिमिटेड

जालिह सुचना मी-श्रीमती उषा मनोहर नाईक, २८/३०३, मालवणी अमेर सोसायटी मर्या.

श्रीमती सावित्री धोंडू मेटेकर स्वर्गवास: 09.04.2015

श्रीमती सुलोचना मुकुंद खानविलकर, अंजली, स्नेहल, श्रेया, दिप, समस्त खानविलकर, घोडिंदे आणि करंजे परिवार

सहाय्य स्मृतिदिन गोरगावचे ज्येष्ठ समाजसेवक के. मुकुंद (भाई) खानविलकर यांना भावपूर्ण आदरांजली.

सार्वजनिक नोटीस ह्या नोटीस द्वारे आपणाम कळविण्यात येते की दि.०१.०१.२००८

द्वितीय पुण्यस्मरण कै. राजदत्त साठे (राज) स्मृती दिना २-४-११

टॅंडर्स दि न्यू इंडिया एश्युरन्स कंपनी लिमिटेड

पुण्यस्मरण प्रथम स्मृतिदिन

दि न्यू इंडिया अश्युरन्स कं.लि. (भारत सरकारचा पूर्ण मालकीची) रजि. व मुख्य कार्यालय - न्यू इंडिया अश्युरन्स बिल्डिंग, ८७, एम.जी.रोड, फोर्ट, मुंबई ४००००१.

निविदा सूचना आम्हच्या जीवशास्त्री ऑपरेशन रजिस्ट्री १० के.सी.मार्ग, वांद्रे रेलमेशन, वांद्रे (पश्चिम), मुंबई ४०००५०

पुण्यस्मरण कै. संभाजी बंडू आंबे मृत्यू: दि. ०९ एप्रिल २०१०

पाचवा स्मृतिदिन श्रीमती. कल्पना संभाजी आंबे श्री. सिताराम बंडू आंबे श्री. प्रशांत संभाजी आंबे श्री. निलेश संभाजी आंबे

अनाउत्संमंट श्री. कु. उषा टिपू मेस्त्री बद्दलून माझे नाव श्री. गितांजली गुरुचं सद्भावांवर असे झाले आहे

श्रीमती सावित्री धोंडू मेटेकर स्वर्गवास: 09.04.2015

सहाय्य स्मृतिदिन गोरगावचे ज्येष्ठ समाजसेवक के. मुकुंद (भाई) खानविलकर यांना भावपूर्ण आदरांजली.

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**Annexure-XIII**  
**Screenshot of EC on Website**

### Facility

ASolution Pharmaceuticals Pvt. Ltd.  
K3/8, Additional MIDC Ambemath,  
Near to MSB Power Substation,  
Ambemath (E) - 421506  
Thane, Mumbai, INDIA  
Phone : [+91 9028098510](tel:+919028098510) to 10  
Email : [contact@asolution.in](mailto:contact@asolution.in)

### Visit Us



### Head Office

ASolution Pharmaceuticals Pvt. Ltd.  
11-A, Mittal Chambers,  
Nariman Point,  
Mumbai - 400021  
INDIA  
Phone : [+91 22 22022930](tel:+912222022930)  
Email : [contact@asolution.in](mailto:contact@asolution.in)

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# **Annexure-XIV**

## **Form-V**



# Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

## FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2023

### Unique Application Number

MPCB-ENVIRONMENT\_STATEMENT-0000056116

### Submitted Date

16-08-2023

## PART A

### Company Information

#### Company Name

ASolution Pharmaceuticals Private Limited

#### Application UAN number

0000058051/CO-2001000219

#### Address

Plot. no. k-3/8, Additional Ambernath Aanad nagar MIDC, Thakurpada, Ambernath East

#### Plot no

K-3/8

#### Taluka

Kalyan

#### Village

Thakurpada

#### Capital Investment (In lakhs)

150

#### Scale

small scale

#### City

Ambernath

#### Pincode

421506

#### Person Name

Sandeep Kurkure

#### Designation

Factory Manager

#### Telephone Number

9821014703

#### Fax Number

9028098511

#### Email

sandeep.kurkure@asolution.in

#### Region

SRO-Kalyan II

#### Industry Category

Red

#### Industry Type

R58 Pharmaceuticals

#### Last Environmental statement submitted online

no

#### Consent Number

0000058051

#### Consent Issue Date

04/01/2020

#### Consent Valid Upto

31/10/2024

#### Establishment Year

2020

#### Date of last environment statement submitted

Aug 16 2023 12:00:00:000AM

#### Industry Category Primary (STC Code) & Secondary (STC Code)

### Product Information

#### Product Name

Propofol

#### Consent Quantity

7

#### Actual Quantity

0.556

#### UOM

MT/A

Nitrofurantoin

66

1.43

MT/A

S + Ibuprofen

6

3.0

MT/A

Trimethyl sulfoxonium chloride

66.0

5.600

MT/A

Efonidipine hydrochloride ethanol

27

0.209

MT/A

Sulfametrole

66.0

0.715

MT/A

Palmitoyl Ethanol Amide

6

3.855

MT/A

Specialty Chemicals	6	1.130	MT/A
Sugammadex Sodium	7	0.930	MT/A

### By-product Information

<b>By Product Name</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Spent Solvent	20	4	Ltr/A

## Part-B (Water & Raw Material Consumption)

### 1) Water Consumption in m3/day

<b>Water Consumption for Process</b>	<b>Consent Quantity in m3/day</b>	<b>Actual Quantity in m3/day</b>
<b>Cooling</b>	96	6.00
<b>Domestic</b>	5	4.00
<b>All others</b>	5	4.00
<b>Total</b>	136	24.00

### 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
Trade effluent	80	8	CMD

### 2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Propofol	10	10	Ltr/A
Nitrofurantoin	5	5	Ltr/A
S+Ibuprofen	10	10	Ltr/A
Trimethyl sulfoxonium chloride	4	4	Ltr/A
Amlodipine	0.5	0.5	Ltr/A
Efonidipine hydrochloride ethanol	0.2	0.2	Ltr/A
Sulfametrole	2.0	2.0	Ltr/A

### 3) Raw Material Consumption (Consumption of raw material per unit of product)

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Pottasium carbonate	0	2.5	MT/A
Sodium Hydroxide	0	20.0	MT/A
Hydrochloric acid	0	20	MT/A
Toluene	0	20.0	KL/A
Methanol	0	30	KL/A
Pottasium carbonate	0	0.2	MT/A
Sodium Methoxide	0	2.3	MT/A
Tetra Hydro Furan	0	3.4	KL/A
Formic Acid	0	0.035	MT/A

Acetic Acid	0	34.6	MT/A
'Sodium Carbonate	0	0.125	MT/A
Activated Carbon	0	1.2	MT/A
Sulphuric Acid	0	9.60	MT/A
Silicagel	0	0.3	MT/A
DMF	0	14.2	KL/A
METHYL CHLOROACETATE	0	3.5	MT/A
5-NITRO, 2- FURFURAL DIACETATE	0	2.5	MT/A
HYDRAZINE HYDRATE	0	1.2	MT/A
Ammonia solution	0	6.3	MT/A
ALUMINA BASIC	0	0.225	MT/A
Palmitic Acid	0	6.9	MT/A
Methyl Chloroformate	0	200	MT/A
Methyl Chloroformate	0	2.8	MT/A
Mono Ethanolamine	0	2.7	MT/A
Gamma Cyclodextrin	0	0.04	MT/A
Oxalyl chloride	0	0.35	MT/A
HEXANE	0	49	KL/A
Methyl Paraben	0	2.15	MT/A
Trimethylsulfoxonium Iodide	0	31.5	MT/A
Benzyltributylammonium Chloride	0	3.3	MT/A
HYFLO DIATOMITE SUPERCEL	0	1.5	MT/A
N-Octyl D-Glucamine	0	2.19	MT/A

#### 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
briquette	210	10	MT/A

### Part-C

#### Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

##### [A] Water

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
pH	0	0	0	0	0

##### [B] Air (Stack)

<b>Pollutants Detail</b>	<b>Quantity of Pollutants discharged (kL/day) Quantity</b>	<b>Concentration of Pollutants discharged(Mg/NM3) Concentration</b>	<b>Percentage of variation from prescribed standards with reasons %variation</b>	<b>Standard</b>	<b>Reason</b>
SPM	10	0.01	100	100	100

### Part-D

## **HAZARDOUS WASTES**

### **1) From Process**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
28.1 Process Residue and wastes	3	5.35	MT/A
28.4 Off specification products	0.162	0.162	MT/A
35.3 Chemical sludge from waste water treatment	1.773	2.19	MT/A
37.3 Concentration or evaporation residues	5.69	4.05	MT/A

### **2) From Pollution Control Facilities**

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
37.3 Concentration or evaporation residues	1.773	4	MT/A

## **Part-E**

## **SOLID WASTES**

### **1) From Process**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
Broken glass	0	0	Kg/Annum

### **2) From Pollution Control Facilities**

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
NA	0	0	Kg/Annum

### **3) Quantity Recycled or Re-utilized within the unit**

<b>Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
0	0	0	KL/A

## **Part-F**

**Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.**

### **1) Hazardous Waste**

<b>Type of Hazardous Waste Generated</b>	<b>Qty of Hazardous Waste</b>	<b>UOM</b>	<b>Concentration of Hazardous Waste</b>
28.1 Process Residue and wastes	3.950	MT/A	NA
37.3 Concentration or evaporation residues	2.0	MT/A	NA
35.3 Chemical sludge from waste water treatment	0.690	MT/A	NA

### **2) Solid Waste**

<b>Type of Solid Waste Generated</b>	<b>Qty of Solid Waste</b>	<b>UOM</b>	<b>Concentration of Solid Waste</b>
NA	0	Kg/Annum	NA

## **Part-G**

**Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.**



<b>Description</b>	<b>Reduction in Water Consumption (M3/day)</b>	<b>Reduction in Fuel &amp; Solvent Consumption (KL/day)</b>	<b>Reduction in Raw Material (Kg)</b>	<b>Reduction in Power Consumption (KWH)</b>	<b>Capital Investment(in Lacs)</b>	<b>Reduction in Maintenance(in Lacs)</b>
R&D activity and analytical lab and others	0.5	0	0	0	0	0

## Part-H

### Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

#### [A] Investment made during the period of Environmental Statement

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
ME plant	No discharge of water to environment	200
ETP with ZLD SYSTEM	MEE WITH RO	0.50

#### [B] Investment Proposed for next Year

<b>Detail of measures for Environmental Protection</b>	<b>Environmental Protection Measures</b>	<b>Capital Investment (Lacks)</b>
NA	NA	0

## Part-I

### Any other particulars for improving the quality of the environment.

#### Particulars

Plantation Done in the factory premices, RO system installed, ME system is being installed

#### Name & Designation

Sandeep Kurkure, Factory Manager

#### UAN No:

MPCB-ENVIRONMENT\_STATEMENT-0000056116

#### Submitted On:

16-08-2023