

Ref. No. - IPCA/EHS/2022/10

Date: 29/12/2022

To,  
**The Joint Director,**  
Regional Office, Western Region  
Ministry of Environment & Forests, Govt. of India  
Kendriya Paryavaran Bhavan, Link Road No. 3,  
Ravi Shankar Nagar, Bhopal-462016

**Subject : Submission of Six Monthly EC Compliance Report of EC Conditions.**

Ref. : 4521/SEIAA/20 on Dated 27/10/2020.

Dear Sir,

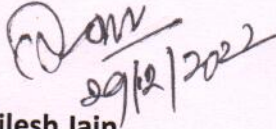
With reference to the above subject, we are submitting herewith Six monthly compliance report of Environmental Clearance for the period of June '2022 to November '2022 for your kind consideration.

We hope that all the document / information as submitted shall be in order.

Please acknowledge the receipt of the same.

Thanking you and with regards,

Yours faithfully  
For Ipca Laboratories Ltd., Dewas

  
29/12/2022  
**Shailesh Jain**  
Unit Head



Encl As above  
CC : Member Secretary (SEIAA-Bhopal)  
CC: Member Secretary (MPPCB-Bhopal)  
CC: Regional Officer (MPPCB-Ujjain)

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**Half Yearly Environmental Compliance Report of Stipulated  
Conditions of  
Environmental Clearance**

**For**

**(June 2022 to November' 2022)**

**By**

**M/s. Ipca Laboratories Ltd, Dewas**

**December' 2022**



S. No.	Conditions of Environment Clearance	Status of Compliance from Jun-Nov'2022
1.	The proposed project is covered under 5 (f) category (B) of the schedule of EIA Notification issued by the Ministry of Environment & Forests vide S.O.1533 (E), dtd. 14.09.2006 and its amendments, hence is required to obtain prior EC. In the context of pandemic COVID -19, GoI's MoEF&CC issued a OM vide dated 13.04.2020, for considering the API & Bulk drug Projects as B-2 category.	Noted
2.	There is no interstate boundary within 10 km and no National Park / Sanctuary within the 5 km of the project area hence the general conditions are not attracted.	Noted
3.	The project occupies a plot Area of 102911 sq.m of land. PP has submitted copy to amended lease deed dtd 17.05.2019 which is executed between District Trade & Industries Center, Dewas Ltd. and Ipca Laboratories Ltd. for the said project .	As Per Amendment in EC Total Plot Area after amendment is 159316 sq m. (Please refer <b>Annexure-1</b> : Letter No. 4521/SEIAA/20 Dated : 27.10.2020)
4.	Total Water requirement will be 1188 KLD from that fresh water requirement will be 712 KLD and 476 KLD will be the recycled water. Water will be sourced through Dewas Water Project Works Private Limited (formerly known as Anjar Water Solution Pvt. ltd.) water supply. PP has submitted copy of consent letter dtd. 30.08.19 issued by Dewas Water Project Works Private Limited.	In this phase 1, Total water requirement will be only 473 KLD and recycle water is 191 KLD. Now as per requirement agreement with Dewas water project works pvt. Ltd. has been executed for 250 KLD, Copy enclosed. (Please refer <b>Annexure-2</b> )
5.	The total wastewater generation will be 501 KLD. From that 476 KLD will be recycled back and 5KLD will be MEE salt and 20 KLD Losses in the ETP including leakages & sludge with moisture. Industrial wastewater will be treated in ETP followed by RO & MEE & treated water will be completely recycled and reused in cooling tower make up water. The domestic sewage will be treated separately in STP at site and treated sewage will be reused for gardening after quality matching with standard norms for on land irrigation given by PCB/CPCB.	In this Phase 1, the effluent quantity will be only 198 KLD and sewage quantity will be 15 KLD. Industrial Effluent treated in ETP followed by RO, MEE and ATFD plant to achieve prescribed Standards and reuse in the process, for cooling tower/boiler feed. Domestic sewage is treated in STP Plant Treated water use for green belt development/ gardening within premises. <b>Photograph attached as Annexure-3.</b>

<p>6</p>	<p>The main source of air pollution are Flue Gas Stack:8 Nos. (2 Boiler of 20 TPH + 2 Boiler of 6 TPH + 2 Thermic fluid heater + 2 DG Set of 1000 kVA each).PP has proposed Mitigation measures for air quality imp cts are:</p> <ul style="list-style-type: none"> <li>• In the standby stacks of boiler &amp; thermic fluid heater PNG will be used. And for working stack of boiler and thermic fluid heater coal consumption is reduced to 50%.</li> <li>• Proper air pollution control equipment will be provided which will meet the stipulated norms provided by MPPCB/CPCB.</li> <li>• Multiple, sequential cyclones followed by state of the art bag filters with efficiency &gt; 97.8% will be provided to meet SPM emission standards.</li> <li>• AFBC based boiler will be installed, in which lime dosing will be done to reduce SO2 emissions (reduction efficiency&gt; 75%).</li> <li>• Effective water spraying will be done on the access roads to control re-entrained dust during dry season (if required);</li> <li>• Proper operating procedures will be followed during startup and shutdown;</li> <li>• Proper PPE like dust masks will be provided to workers and its use ensured;</li> <li>• Regular Work place monitoring will be done;</li> <li>• LDAR program will be conducted regular.</li> </ul>	<p>In this Phase 1, we have installed 1 stack for Boiler of 6 TPH, and 1 stack for DG Set of 1000KVA.</p> <ul style="list-style-type: none"> <li>● In this Phase 1, we have installed only 1 boiler of 6 TPH capacity based on natural coal .</li> <li>● We have provided Air pre heater, Multicyclone and Bag filters in boiler for air pollution control.</li> <li>● Noted &amp; we will installed AFBC based boiler in next phase.</li> <li>● RCC road with pavers provided.photographs attached as <b>Annexure-30</b>.</li> <li>● Boiler startup and shutdown procedure is the part of boiler SOP, Boiler operation SOP prepared.</li> <li>● All required PPEs provided.photographs attached as <b>Annexure-54</b>.</li> <li>● Work place monitoring SOP prepared and monitoring is being done as per Schedule.</li> <li>● LDAR program is cover in Preventive maintenance schedule, SOP prepared for preventive maintenance of pumps.</li> </ul>
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7	<p>PP has proposed following mitigation measures will be implemented to reduce surface water related impacts:</p> <ul style="list-style-type: none"> <li>• Fresh water demand will be reducing by proposing zero liquid discharge system .</li> <li>• Treated water will be completely reused in plant.</li> <li>• No discharge of untreated waste water on land to avoiding leakages;</li> <li>• Separate drainage for storm water and effluent will be provided to avoid any contamination of surface water sources;</li> <li>• All chemical and fuel storage and handling areas will be provided with proper bunds to avoid run-off contamination during rainy season.</li> <li>• Solid Wastes will be properly handled in closed containers and properly stored in hazardous waste storage areas as per rules having suitable lining and also bunding for overflow of spillage waters which can contaminate the surroundings .</li> <li>• Ash generated from the boiler will be stored properly and sold to nearest cement or brick manufacturing industries.</li> </ul>	<ul style="list-style-type: none"> <li>● Zero liquid Discharge facility installed and maintained.No any untreated waste water will be discharge on land.Recycle water used in process. Photograph of ZLD facility attached as <b>Annexure-3</b>.</li> <li>● RCC storm water drain prepared with 03 guard pond each pond capacity 100 KL.</li> <li>● All chemicals storage/tank farm area have provided dyke wall to avoid contamination.Photograph attached as <b>Annexure-25</b>.</li> <li>● SOP prepared for Management and Handling of Chemical and Disposal of Hazardous waste.SOP attached as <b>Annexure-53</b>.</li> <li>● Dedicated and covered area prepared for ash storage and send to brick manufacturing industries. Photographs of Ash handling area attached. Please refer <b>Annexure-15</b>.</li> </ul>
8	<p>Hazardous waste generated from the proposed project will be in the form of used /spent oil which will be sold to authorised recyclers. MEE Sludge will be sent to TSDF, Pithampur for safe disposal and spent catalyst will be sold to actual reusers. These wastes will be collected, stored properly and will be send to relevant vendors / recyclers /reprocessors. The other solid waste like coal ash will be sent to briquette manufacturer. PP has submitted Acceptance letter for co-processing for cement kiln with J K Cement plant and agreement for co-processing with UltratechCement. Acceptance letter of TSDF, Pithampurand willingness letter for pre-processing of hazardous waste from GEPIL also submitted by PP.</p>	<p>We have provided hazardous waste yard for collection &amp; storage of hazardous waste.We have done agreement with Pithampur Industrial Waste Managment pvt. Ltd. (TSDF Ramky) for disposal and incineration of Hazardous waste, M/s. GGEPI (Chittore) and M/s. Hazargo Industries Pvt. Ltd. For Co-processing, and M/s. KGN Traders for recycling of Hazardous waste. Please refer <b>Annexure-9,,Annexure-21 &amp; Annexure-22 and Annexure-23</b>. Coal ash is being sent to brick manufacturer.</p>



9	<p>The power requirement of 3500 kVA shall be met from Madhya Pradesh Paschim Kendra Vidyut Vitaran Company Ltd. There will be two proposed DG sets of 1,000 KVA which will be operated only during power failure .For energy Conservation PP has proposed as follows :-</p> <ul style="list-style-type: none"> <li>•Energy efficient machineries like AHU , Centrifuge, Reactor, ETP and motors will be used during operation phase. Installation of economizer &amp; high efficiency burner on steam boilers.</li> <li>•Using water cooled chillers, variable frequency drives for secondary pumps and public area and building management system for HVAC equipment with non-CFC and non-HCFC based refrigerants.</li> <li>•Modification of HVAC System to re-circulation type form once through system to reduce the power consumption &amp; Stoppage of HVAC system during no production time.</li> <li>•Energy efficient lubricant oil for planetary gear boxes.</li> <li>•Gravity flow will have preferred wherever possible to save pumping energy.</li> </ul>	<p>In this phase 1 agreement done for 1150 KVA with M.P. paschim kendra vidyut vitaran company ltd. Agreement copy enclosed.(Please refer <b>Annexure-4</b>)</p> <ul style="list-style-type: none"> <li>● Energy efficient machineries installed accordingly.</li> <li>● All the chiller having installed eco friendly refrigerant.</li> <li>● All the HVAC systems are recirculation type.</li> <li>● Energy efficient lubricant oil will be used for gear boxes.</li> <li>● In ETP flow is being done by gravity, which is as follows, Coagulation tank→Flocculation tank→Primary clarifier→Anoxic tank→Bioreactor-01→Secondary clarifier 01→Bio reactor 02→Secondary clarifier 02→Intermediate tank Similarly in production area gravity flow is maintained.</li> </ul>
10	<p>For rainwater harvesting calculations , areas like process and storage, Godown, scrap yard etc. are excluded due to having chances of contamination. Runoff water generated from Roof Top (admin block, Utility, canteen, security, Warehouse) will be used to store rainwater for water conservation.</p>	<p>Total 04 Nos. Rain water harvesting system installed on following buildings.</p> <ol style="list-style-type: none"> <li>1. Security and Admin building</li> <li>2. QC building</li> <li>3. QA and guest house building</li> <li>4. Fire hydrant tank and pump house building.</li> </ol> <p>Photographs and design of RWH enclosed. Please refer <b>Annexure -5 &amp; 6.</b></p>

11.	<p>For Fire Protection PP has proposed to protect the plant by means of different fire protection facilities and consist of:</p> <ul style="list-style-type: none"> <li>• Hydrant system for exterior as well as internal protection of various buildings/areas of the plant.</li> <li>• Portable extinguishers and hand appliances for extinguishing small fires in different areas of the plant.</li> <li>• Water cum foam monitor to be provided in bulk fuel storage area</li> <li>• Fire water pumps. Two (2) independent motor driven pumps each of sufficient capacity and head are proposed for the hydrant systems which are capable to extinguish Fire or cooling purpose.</li> <li>• Smoke &amp; fire detection system along with water &amp; foam sprinkler system will be provided. During installation NBC guideline will be followed. NOC from fire department will be obtained.</li> <li>• For firefighting adequate width road and turning is considered for movement of fire tender.</li> </ul>	<ul style="list-style-type: none"> <li>● All area of premises covered by fire hydrant line.</li> <li>● Portable fire extinguishers installed on various location of plant and building when required, Also SOP prepared for fire fighting.</li> <li>● Total 05 Nos. Water cum foam monitor system installed at following locations. <ol style="list-style-type: none"> <li>1. PESO tank area.</li> <li>2. SRP area</li> <li>3. Boiler/DG area</li> <li>4. Ware house area</li> <li>5. SRP tank farm area</li> </ol> </li> <li>● Fire fighting system comprising water storage tanks 1200 KL and jockey pump/main electrical pump /Diesel engine driven pump installed with standby pump.</li> <li>● Smoke detector, Fire alarm system and foam sprinkler system provided as per NBC guide line.</li> <li>● Fire NOC obtained, Copy enclosed.(Please refer <b>Annexure-7</b>.)</li> <li>● 06 Mtr width RCC road provided.</li> </ul>
12.	<p>The proposed site has already 217 well developed trees of ten species but out of these, approximate 40% i.e. 87 trees are likely to be cut with prior approval from concerned authority and 130 trees will be retained.</p> <p>28% greenbelt will be developed at site and additional 55,790 sq.m. or 5.579 ha area is being proposed on nearby plot for development of greenbelt. PP has submitted Allotment letter from DIC for Additional Greenbelt Area.</p> <p>To fulfill the standard of 33% green area of total plot area , additional 4.3% i.e. 4425.17 m<sup>2</sup> with a total plantation of 664 trees will be provided. However, 55,790 m<sup>2</sup> or 5.579 Ha area (instead of 4,425.17 m<sup>2</sup> i.e 4.3% of total plot area) is being proposed on nearby plot for development of greenbelt with a total plantation of 8369 trees Overall plantation of 12,667 trees (4298 trees at site+ 8369 trees on adjoining plot) of various species is planned to reduce the overall impact in surrounding environment due to the proposed project.</p>	<p>All the trees are retained and no trees cutting at site.We have designed our layout according to available space without cutting any existing tree. At present 217 well developed tress are available at site.</p> <p>We have developed green belt area in 29% of total land. <b>Annexure-28</b> attached for Green Belt development at site.</p> <p>2 Nos. Garden development having approx area 45000 M<sup>2</sup> and 30000 M<sup>2</sup> are taken from local administration .Approximate 2000 Nos. Trees planted in both the garden.</p> <p>We have already planted 5800 no. of trees at site to develop green belt area.Out of this around 4300 Nos. Of trees are surviving at present.</p>

13.

The unit will spend INR 4.875 Crore for 5 years (i.e. 1.5% of project cost - INR 325 Crores as per the OM dated May 1, 2018) for undertaking the Corporate Environment Responsibility (CER) activities in study area as shown in Table:

S. No.	Activities	Budget in%	Budget Amount (INR In crores)
1.	Education	30%	1.462
1.1	Education and training for COVID 19		
1.2	ITI Training Program		
1.3	Infrastructure development (renovation of building furniture, classrooms , CCTV, paver blocks she library, water storage tank etc.)		
1.4	Uniforms		
1.5	Computers		
1.6	Sports Kit		
1.7	Water filter with cooler		
2.	Health and Hygiene	15%	0.7312
2.1	Community Toilets		
2.2	Medical Camps		
2.3	Veterinary Camps		
2.4	Hospitals/Clinic		
3.	Safe Drinkina Water	15%	0.7312
3.1	Water Tank		
3.2	Bore Well		
3.3	RO Plant		
4.	Infrastructure developpent / facilities	25%	1.218
4.1	Construction/repair and maintenance of public buildings/ utilities like community hall, drainage svstem, oanchavat buildina, renovation of Primarv health centre etc. Solar Street light		
5.	Skill Development	10%	0.4875
5.1	Skill Development Programme		
6.	Plantation in community areas	5%	0.2437
	Total	100%	4.875

- As of Now we have spent cumulative 2.73 crores in CER activities.The details of the same is attached as **Annexure-8**.



## Ipca Laboratories Ltd. Dewas

### A. EC Specific condition as recommended by SEIAA Compliance

S.No.	EC Condition	Compliance Status
1	The entire demand of fresh water should be met through Dewas Water Project Works Private Limited as committed in letter dated 30.08.19	We are fulfilling the entire demand of the fresh water through Dewas Water Project Works Private Limited. We have attached the copy of agreement bill as <b>Annexure-2.</b>
2	Fresh water should not be used for Irrigation and gardening purpose	We are using STP treated water for gardening purpose.
<b>3</b>	<b>Waste water</b>	
3(a)	PP should ensure “Zero effluent discharge” from the unit by 100%recycling. The water softening reject, boiler blow down reject and cooling blow down will be treated in ETP. Further treated waste water will go through the RO and finally re used / recycled in the process and unused waste water evaporates in MEE.	We have installed Zero Liquid Discharge facility and our ZLD designed as per Condition and following are the capacities of components- STP: 50 KLD ETP: 600 KLD RO: 438 KLD MEE: 100 KLD ATFD: 21.8 KLD Photograph attached as <b>Annexure-3.</b>
3(b)	RO and MEE should be provided for treatment of high COD waste streams and only in case of emergency/breakdown high COD wastes should be disposed off through CTSDF , Pithampur, Dhar.	We have installed RO , capacity 438 KLD & MEE, Capacity-100 KLD for treatment of high COD/high TDS Stream. We have also an agreement with CTSDF, Ramky, Pithampur for disposal of of the same in any breakdown. Agreement copy with CTSDF attached as <b>Annexure-9.</b>
<b>4</b>	<b>For Air Pollution:</b>	
4(a)	PP should ensure install Bag house in stack for control of air pollution and stack height as proposed in the EIA/EMP.	We have installed Bag filter on Boiler and connected with stack for control of air emission. Photographs attached as <b>Annexure-10.</b> Capacity in CFM – ID=9000 CFM, FD=5250 CFM Make – Industrial Boilers Ltd. Type – Fluidized bed combustion MOC of filter media : Rayon PPS bag (Poly Phenylene Sulphide) The height of installed Boiler stacks and DG set are as per CPCB guideline. Photographs attached as <b>Annexure-11&amp; Annexure-12.</b> Boiler stack Height /Dia: Height=32 Mtr/ Top Dia=800 mm, Bottom Dia= 1800 mm DG set stack Height /Dia : Height=30 m, Dia=350 mm
4(b)	The performance of air pollution control system should be regularly monitored and maintained.	We are complying & regularly maintaining the air pollution control system. We are maintaining Log Books for the same as following -  Bag filter : Part of boiler operation logbook

		Chimneys : Annual thickness testing with ultrasonic tester will be done Scrubbers : Part of Batch manufacturing records . Dust collectors : Part of BPCR
4(c)	PP should ensure regular stack monitoring & Ambient air quality monitoring and should be carried out as per the guidelines/norms of MPPCB/CPCB.	We are conducting stack monitoring & ambient air monitoring as per the guidelines/norms of MPPCB/CPCB through NABL/MoEF approved lab. Monitoring reports are attached as <b>Annexure-13 &amp; Annexure-14.</b>
4(d)	In plant control measures for checking fugitive emission from all the vulnerable sources shall be provided. Fugitive emission shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, Multi cyclone separator/bag filters and water sprinkling system.	following measures taken - RCC roads with pavers for material movement :Done Ash handling : closed area prepared Coal handling system :Coal stored under shed and feed by conveyor APH/Cyclone at boiler :APH and Cyclone installed water sprinklers : Installed Photographs of RCC road with pavers, Ash Storage Area, coal storage area, APH and Multicyclone are attached as <b>Annexure-15.</b>
4(e)	Dust suppression system including water sprinkler system / fogging arrangement shall be provided at loading and unloading areas to control dust emission.	Water sprinkler system & fire hydrant system provided at loading and unloading areas to control dust emission. Also coal handling and storage area equipped with sprinklers.Please refer <b>Annexure-43.</b>
4(f)	Fugitive emission in the work zone environment, product, raw material storage areas etc. Shall be regularly monitored.	We have Installed on line VOC meter at solvent recovery plant. Raw material storage area designed with proper Auto ventilation.
4(g)	High efficient four stage ventury scrubber should be provided.	We have installed 6 Nos. Scrubbers.Photographs attached as <b>Annexure-16.</b>
4(h)	Transportation of raw material and finished goods should be carried out in covered trucks.	Noted and we comply. Photographs attached as <b>Annexure-17.</b>
4(i)	Company shall carry out the HAZOP study and report shall be submitted to ministry MoEF & CC Regional Office, Bhopal.	We have performed HAZOP Study and the report submitted ministry MoEF & CC Regional Office, Bhopal.Copy of HAZOP attached as <b>Annexure-18.</b>
4(j)	For control of fugitive emission and VOCs following steps should be followed.	
●	Chilled brine circulation system shall be provided and it should be ensured that the solvent recovery efficiency is not be less than 95%	We have provided Chilled brine plant, capacity -134 TR and condensers having provision for use .We are achieving the solvent recovery as per given percentage.Photograph enclosed as <b>Annexure-19.</b>
●	Reactor and solvent handling pump shall be provided with mechanical seal to prevent leakage.	We are complying.All solvent handling pumps are having mechanical seals .
●	Closed handling system should be provided for chemicals	Storage tanks with pump and piping installed with batch receivers at plant to ensure closed handling. Photograph attached as <b>Annexure-20.</b>
●	System of leak detection and repair of pump/pipeline should be based on preventive maintenance.	Preventive maintenance schedule for each equipment is prepared .

●	Solvent shall be taken from underground storage tank to reactor through closed pipeline. Storage tank shall be vented through trap receiver and condenser operated on chilled water.	All the underground solvent storage tanks provided with N2 blanketing system. Hence vent condenser / trap not required.
<b>5</b>	<b>Hazardous waste management</b>	
5(a)	As proposed above, PP should ensure disposal of hazardous waste regularly and there should be no dumping of these materials in the premises/outside.	We have done agreement with Pithampur Industrial Waste Management pvt. Ltd. (TSDF Ramky) for disposal and incineration of Hazardous waste, M/s. GGEPI (Chittore) and M/s. Hazargo Industries Pvt. Ltd. For Co-processing, and M/s. KGN Traders for recycling of Hazardous waste. Please refer <b>Annexure-9,Annexure-21,Annexure-22 and Annexure-23.</b>
5(b)	PP should ensure handling, disposal and management of hazardous waste as per the related prescribed rules.	Noted, we are complying.
5(c)	PP should obtain Renewal of authorization regularly from MPPCB for collection storage and disposal of hazardous waste (Management, handling & trans boundary Movement) Rules 2008 and its amendments. Membership of the TSDF should be renew in time to time for hazardous waste disposal.	Noted, we have obtained authorization from MPPCB for collection,storage and disposal of hazardous waste.We have done agreement with Pithampur Industrial Waste Management pvt. Ltd. (TSDF Ramky) for disposal and incineration of Hazardous waste.Please refer <b>Annexure-9.</b>
5(d)	Hazardous chemicals should be stored in sealed tanks, drums etc. Flame arrestors shall be provided on tanks. To avoid the spillage from processing unit, Industry shall provide fully mechanized filling and packaging operation unit.	Yes, we have complied.All the chemicals stored in sealed tanks. Flame Arrestors & closed area with lock & key provided on the tanks. Photographs attached as <b>Annexure-24.</b> Fully mechanized filling provided through pumps to avoid the spillage from processing unit .Photographs attached as <b>Annexure-20.</b>
5(e)	Ensure the transportation of raw/ finished material only by covered vehicles.	Noted, we comply. Photographs attached as <b>Annexure-17.</b>
5(f)	Ensure the storage and handling of all the chemicals in a proper and safe manner to avoid any spillages and also to prevent runoff contamination in monsoon.	We have provided Dyke wall with sump and pump to all the chemical storage tanks.Photographs attached as <b>Annexure-25.</b>
5(g)	Ensure collection & Treatment of spillages, if any.	We have provided spill kits at shop floor. We have provided dyke wall with collection pits for all hazardous chemical storage tanks and also provided spill control pallets for storage and transportation of hazardous chemical. Photographs attached for the same. Please refer <b>Annexure-25,Annexure-26 &amp; Annexure-27.</b>
5(h)	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of hazardous chemicals.	HAZOP study along with PSI/PHA has been done.Please refer <b>Annexure-18.</b> JSA for each activity also prepared.
5(i)	PP should ensure to implement the process as per Acceptance letter for co-processing for cement kiln with J K cement plant and agreement for co-processing with Ultra tech cement.	We had taken NOC for agreement from Ultratech & J.K. Cement for co-processing at the time of applying for EC.Now we have done agreement with approved agencies i.e. GGEPI and HAZARGO Industries Pvt. Ltd. after verifying



		consent and other approvals. Please refer <b>Annexure-21 &amp; 22.</b>
<b>6</b>	<b>Green Belt Development</b>	
6(a)	It is noted that the proposed site has already 217 well developed trees of ten species but out of these, approximate 40% i.e. 87 trees are likely to be cut PP should ensure to obtain prior approval for cutting the existing trees.	All the trees are retained and no trees cutting at site. We have designed our layout according to available space without cutting any existing tree. At present 217 well developed trees are available at site.
6(b)	PP should ensure plantation as proposed 28% green belt of the total area. Plantation in the project area of indigenous local varieties like neem, Peepal, Kadam and kachnaar.	We have done plantation to develop green belt area as per given condition. Green belt layout attached as <b>Annexure-28</b> . Photographs of green belt area attached as <b>Annexure-29</b> .
6(c)	Every effort should be made to protect the existing trees on the plot.	We have diverted RCC pucca road to save peepal tree and also diverted storm water drain channel to save Ashok Tree. Also we have diverted Hydrant line to save Neem tree. Photographs attached as <b>Annexure-30</b> .
6(d)	Overall plantation of 12,667 trees (4298 trees at site + 8369 trees on adjoining plot) of various species is planned to reduce the overall impact in surrounding environment due to the proposed project .	We have already planted 5800 no. of trees of different species like Neem, Peepal, Kadam and kachnaar in surrounding periferi of company premises. Out of which 4300 Nos. Of trees are alive at present. Photographs of plantation attached as <b>Annexure-29</b> .
6(e)	Green area including thick green-belt shall be developed in at least 33% of the plot area to mitigate the effect of fugitive emissions all around the plant in consultation with the forest department as per the guidelines of CPCB.	We have complied. We have done plantation all around the plant to reduce the effect of fugitive emissions as per EC condition.
7	PP should obtain NOC/ approval from competent authority for health & safety measure, On site & offsite disaster management, and Risk management plan before commencing with the forest department as per the guidelines of CPCB.	We have obtained Onsite Emergency plan. Certificate attached as <b>Annexure-31</b> . We have also attached copy of Offsite disaster management Plan attached as <b>Annexure-32</b> and Risk management plan for product attached as <b>Annexure-33</b> .
8	PP should obtain fire NOC from the competent authority before commencing the operation of the unit.	Fire NOC obtained. Copy attached as <b>Annexure - 7</b> .
9	PP should ensure installation of photo voltaic cells (solar energy) for lighting in common areas, LED light fixtures and energy efficient equipment's.	We have installed 12 Nos. of Solar lights. Photographs attached as <b>Annexure-34</b> . Also installed LED lights in all areas and all motors/electrical equipment's are energy efficient. Photographs attached as <b>Annexure-42</b> .
10	PP should ensure the implementation of CER activities to the extent of Rs.4.875 Crore for 5 years as committed during presentation to the extent on regular basis in consultation with the Gram Panchayat of the receptive village.	As of Now we have spent cumulative 2.73 crores in CER activities. The details of the same is attached as <b>Annexure-8</b> and photograph of ongoing CER activity attached as <b>Annexure-35</b> .
11	The validity of the EC shall be as per the provisions of EIA Notification subject to the following : Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product-mix in proposed mining unit shall	Noted

	require a fresh Environment Clearance.	
12	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	Noted
13	Total quantity of runoff water generated and green belt area should be collected in underground tank & used for process in plant to minimize fresh water requirement.	We have constructed 03 Nos. RCC Guard pond with storm drain channel,Capacity of each tank is 100 KL.
14	PP should ensure to submit half yearly compliance report and CSR activity report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC. Gol, Bhopal) than prior environmental clearance issued to PP will automatically be treated as canceled/revoked as per OM No.930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.	Noted, we are complying.We have uploaded half yearly EC compliance report for the period of June'2022 on Parivesh portal of MoEF & XGN portal of MPPCB. Screen shot attached as <b>Annexure- 68</b> . Also we have sent hard copy of EC compliance report, June22 to MPPCB, MoEF and SEIAA We are submitting half yearly EC compliance report for December'2022.

**Ipca Laboratories Ltd. Dewas**  
**EC Specific Condition recommended by SEAC Compliance**

S.NO.	EC Condition	Status
A	<b>Statutory compliance</b>	
i	The project proponent shall obtain Consent to establish/operate under the provisions of Air (Prevention & Control of pollution) Act, 1981 and the Water (Prevention & Control of pollution ) Act, 1974 from the Madhya Pradesh Pollution Control Board(MPPCB)	We are complying the same . We have obtained consent no. AWH-55002 from MPPCB.Air/Water Consent valid upto 31/01/2024.Copy of consent attached as <b>Annexure-36</b> .
ii	The project proponent shall obtain authorization under the Hazardous and other waste management Rules, 2016 as amended from time to time & permission of competent authority if ant tree falling is to be carried out.	We are complying the same . We have obtained consent no. AWH-55002 from MPPCB. Hazardous waste authorization is valid upto 31/01/2027. Copy of consent attached as <b>Annexure-36</b> .
iii	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous chemicals shall be as per the Motor Vehicle Act(MVA), 1989.	Noted, we have complied. We have obtained PESO license ,copy enclosed as <b>Annexure-37</b> .We have prepared checklist for vehicles entry at premises. Attached as <b>Annexure-38</b> . We have also prepared SOP for road safety to manage transportation inside the

		premises. SOP attached as <b>Annexure-39.</b>
<b>B</b>	<b>Air quality monitoring and preservation</b>	
i	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986	We have conducted quarterly Fugitive emission monitoring through NABL approved Azis lab. Ambient Air Monitoring reports attached as <b>Annexure-14.</b>
ii	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released e.g. PM10 and PM2.5 in reference to PM emission and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each) covering upwind and downwind directions. The project proponent shall install one continuous ambient air quality monitoring system in Dewas industrial area and display its results through display board for public awareness. The location of this station shall be finalized in consultation with the regional officer, M.P. Pollution Control Board, Dewas.	Ambient air monitoring conducted by NABL and MOEF approved lab on quarterly basis. Layout of dedicated 4 points locations( East, West, North & South) for monitoring attached as <b>Annexure-14.</b> CAAQMS installed in coordination with MPPCB Dewas and Dewas collector. Same has been connected with server. photographs attached as <b>Annexure-40.</b>
iii	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS . Sulphur content should not exceed 0.5% in the coal/ Bio Briquette for use in Coal// Bio Briquette fired boilers to control particulate emissions within permissions within permissible limits(as applicable). The gaseous emissions from the boiler, DG set and scrubber shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	We have installed Bag filter, Multicyclone and Air preheater in Boiler as pollution control devices and also we have provided scrubbers in process stack. We have also provided stack of appropriate height for boiler and DG set as per CPCB/SPCB guidelines. Stack monitoring reports are attached as <b>Annexure-13</b> & photographs of air pollution control devices are attached as <b>Annexure-35.</b>
iv	Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Raw material & Coal stored in covered area as per enclosed photographs Please refer <b>Annexure-36.</b>
v	The 2 DG sets (2nos. X 1000 KVA = 2000KVA) shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regards.	We have installed 01 Nos. DG set , capacity 1000 KVA present which is sufficient as per our production load. We will installed an other 1000 KVA DG set in future as per requirement. We have provided acoustic enclosure to DG set as pollution control devices. The height of stack is 30 mt. Photographs attached as <b>Annexure-37.</b>
vi	DG exhaust will be discharged at height stipulated by CPCB.	Noted, We are complying. Stack height of DG set is - 30 Mtr.
vii	National Emission Standards for Organic chemicals manufacturing industry issued by the ministry vide G.S.R. 608(E) dated 21st July , 2010 and amended from time to time shall be followed.	Noted
viii	The national ambient air quality emission standards issued by the Ministry vide G.S.R.No 826(E) dated 16th November 2009 shall be accomplish with.	Noted



C	<b>Water Quality Monitoring and Preservation</b>	
i	The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	As per CTO condition we have installed online flow meter at RO permeate point and connected to same with MPPCB server. PTZ camera installed with night vision capability at storm water drain outlet point, connectivity with server also done. Photographs of online flow meter & PTZ camera attached as <b>Annexure-38.</b>
ii	As already committed by the project proponent Zero Liquid Discharge shall be ensured and no waste/ treated water shall be discharged outside the premises.	We have installed ETP, capacity 600 KLD, RO, capacity-438 KLD, MEE, capacity 100 KLD and ATFD, capacity -21.8 KLD and STP, capacity -50 KLD to achieve Zero Liquid Discharge condition. Hence we are not discharging waste or treated water outside the premises. Photographs of ZLD facility attached as <b>Annexure-2.</b>
iii	718 KLD water will be consumed from Dewas Water Project Works Private Limited (Formerly known as Anjar Water solution Pvt.Ltd.) water supply. The effluent shall (531KLD) be segregated as high COD/High TDS and low COD/Low TDS effluents and sewage. The HCOD/HTDS shall be neutralized and sent to stripper followed by MEE and ATFD. LCOD/LTDS effluent shall be treated in ETP followed by RO/MEE system, domestic effluent shall be treated in STP. The treated effluent shall be entirely reused and recycled in cooling tower make-up / Boiler feed and treated sewage shall be used in gardening.	We have been granted consent for AWH from MPPCB. As per current consent our total fresh water consumption is 473 KLD supplied by from Dewas Water Project Works Private Limited and our effluent generation is 198 KLD and total sewage generation is 15 KLD. We have segregated High COD/High TDS and low COD/low TDS effluent streams. Effluent having HCOD/HTDS is transferred to Stripper followed by MEE and ATFD for treatment. Low COD/Low TDS effluent is treated in ETP and RO. RO permeate is reused and RO reject is sent to MEE for further treatment. Sewage is treated in STP and treated water is reused in gardening.
iv	Adhere to 'Zero Liquid Discharge and No industrial effluent from the unit shall be discharged outside the plant premises. PP should also install Internet Protocol PTZ camera with night vision facility along with minimum 05X zoom and data connectivity must be provided to the MPPCB's server for remote operations.	We have installed ETP, capacity 600 KLD, RO, capacity-438 KLD, MEE, capacity 100 KLD and ATFD, capacity -21.8 KLD and STP, capacity -50 KLD to achieve Zero Liquid Discharge condition PTZ Camera installed with night vision 42X zoom capacity at storm water drain outlet point, connectivity with server also done, photographs attached as <b>Annexure-38.</b>
v	The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the Madhya Pradesh Control Board while granting Consent under the Air/Water Act, whichever is more stringent.	Noted & Agreed.
vi	Total fresh water requirement shall not exceed 718 KLD and as proposed Dewas Water Project Works Private Limited shall provide the fresh water.	Noted, and as per requirement agreement done for 250 KLD water with Dewas water project works pvt. ltd. Please refer <b>Annexure-1.</b>
vii	Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate	We have complied. We have made Arrangement for the same accordingly. Total 03 Nos. RCC Guard pond constructed with storm

	conveyance system.	drain channel, each tank capacity is 100 KL.
viii	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	We have installed total 04 Nos. Of Rain water harvesting system on following buildings. 1. Security and Admin building 2. QC building 3. QA and guest house building 4. Fire hydrant tank and pump house building Photograph of RWH system attached as <b>Annexure - 39.</b>
ix	Dedicated power supply shall be ensured for uninterrupted operations of treatment systems.	HT connection taken for power and Separate LT feeder with Adequate protection installed.
<b>D</b>	<b>Noise Monitoring and prevention</b>	
i	Acoustic enclosure shall be provided to 2 nos x 1000 KVA = 2000KVA sets for controlling the noise pollution.	In this Phase 1 we have installed 1000 KVA DG and provided acoustic enclosure to control noise pollution. Photographs attached as <b>Annexure-37.</b>
ii	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. On all sources of noise generation.	We have installed Acoustic Enclosure for DG set and Air Blowers. Also we are providing ear muffs & ear plugs to shop floor employees. Photographs are attached as <b>Annexure-40.</b> SOP prepared for noise monitoring and record maintained as per SOP.
iii	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	We have prepared SOP for noise monitoring and maintain record as per SOP format. Please refer <b>Annexure-41.</b> Noise level checked in various areas and found below 70 dB.
<b>E</b>	<b>Energy Conservation measures</b>	
i	The energy sources for lighting purposes shall preferably be LED based.	Noted & LED lights installed. Please refer <b>Annexure-42.</b>
ii	The total power requirements for project will be 3500KVA. The power will be supplied by Power Generator i.e. Grid Power (Madhya Pradesh Paschim Kendra Vidyut Vitaran Company Ltd.)	Agreement with MPPKVVC has been done. Copy of agreement with MPPKVVC attached as as <b>Annexure-4.</b>
<b>F</b>	<b>Waste management</b>	
i	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps	Tanks farm installed as per desired accessories. Hazardous chemicals stored in tanks, tank farms, drums. Flame Arrestors provided on the tanks. Mechanized filling through pumps provided. Photographs attached as <b>Annexure-15.</b>
<b>ii</b>	<b>Hazardous wastes such as</b>	
a	Process Residue & waste, Spent Carbon, Date expired Products (0.5% of total production capacity), Off specification products (0.5% of total production capacity), Contaminated cotton Rugs and other cleaning material, Spent Filter media, Spent iron exchange resin, Spent/Waste	Noted. We have done agreement with Pithampur Industrial Waste Management pvt. Ltd. (TSDF Ramky) for disposal and incineration of Hazardous waste, M/s. GGEPI (Chittore) and M/s. Hazargo Industries

	solvent from process and ETP ZLD system, Any process or distillation residue, shall be directly sent to incineration at CHWIF at Pithampur or send for co-processing at authorized cement industry or pre-processing.	Pvt. Ltd. For Co-processing, and M/s. KGN Traders for recycling of Hazardous waste. Please refer <b>Annexure- 9,Annexure-21 &amp; 22</b> and <b>Annexure-23.</b>
b	Sludge/MEE salt from Wastewater Treatment Plant, Asbestos Sheet shall be directly sent to MPWMP for disposal at Pithampur.	Noted
c	Used Oil / Spent oil, Process mother liquor, Corrosive waste acid / caustic lye, Spent catalyst shall be sent to authorized decontamination facility/ recyclers or reuse.	Noted
d	The Fly ash generated from boilers shall be stored in silos/ covered shed and disposed of through cement manufacturers by bulkers / closed containers and should comply with Fly Ash Utilization Notification, 1999 and as amended subsequently.	Noted
e	If any Flammable, ignitable , reactive and non-compatible wastes should be stored separately and never should be stored in the same storage shed.	Noted
f	Automatic smoke, heat detection system should be provided in the sheds. Adequate fire fighting systems should be provided for the storage area.	We have provided smoke detectors in all the required places. Also we have provided different class of fire extinguishers for all types of fires,sprinkler system, fire alarm system and fire hydrant system. Photographs attached as <b>Annexure-43.</b>
g	In order to have appropriate measures to prevent percolation of spills, leaks etc. To the soil and ground water, the storage area should be provided with concrete floor of inert material or steel sheet depending on the characteristics of waste handled and the floor must be structurally sound and chemically compatible with wastes.	We have provided RCC floor in haz waste storage yard to prevent any percolation of spills, leaks etc. to the soil and ground water. Also we have provided impervious floor to avoid soil & ground water contamination. Photographs attached as <b>Annexure-44.</b> Chemical resistance flooring installed.
h	Measures should be taken to prevent entry of runoff into the storage area, the storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.	We have complied. Our storage yard is as per condition.Plinth level designed accordingly . Photographs attached as <b>Annexure-45.</b>
i	The storage area floor should be provided with secondary containment such as proper slopes as well as collection pit so as to collect wash water and the leakages / spills etc.	We have provided storage area with secondary containment and proper slope as well as collection pit to collect wash water and leakages.Photographs attached as <b>Annexure-46.</b>
j	Storage areas should be provided with adequate number of spill kits at suitable locations. The spill kits should be provided with compatible sorbent material in adequate quantity.	We have provided adequate spill kits at hazardous waste storage yard.Photographs attached as <b>Annexure-47.</b>
k	Recent MSDS of all the chemicals used in the plant be displayed at appropriate places.	We have complied. We have displayed the MSDS. <b>Annexure-48</b> attached for the same.
l	Proper fire fighting arrangements in consultation with the fire department should be provided against fire incident.	We have proper fire fighting arrangement. We have provided fire hydrant system, smoke detector system, fire extinguisher,and sprinkler system.Please refer <b>Annexure-43.</b> We have

		obtained Fire NOC from DISH. Copy of Fire NOC is attached as <b>Annexure-7</b> .
m	All the storage tanks of raw materials / product shall be fitted with appropriate controls to avoid any spillage /leakage .Bund/duke walls of suitable height shall be provided to the storage tanks. Closed handling system of chemicals shall be provided.	We have provided appropriate bund/dyke wall in all storage tanks.Photographs attached as <b>Annexure-25</b> .We have provided closed handling system for transferring of chemicals. Photographs attached as <b>Annexure-20</b> .
n	Log-books shall be maintained for disposal of all types hazardous wastes and shall be submitted with the compliance report.	All the hazardous waste handled through Online Manifest only.We maintained the generation and disposal record in form-3.
o	Process organic residue and spend carbon, if any, shall be send to cement industries for co-processing or for pre-processing. ETP sludge ,process inorganic & evaporation salt shall be disposed off to the TSDF.	Noted and complying. We had taken NOC for agreement from Ultratech & J.K. Cement for co-processing at the time of applying for EC.Now we have done agreement with GGEPI and HAZARGO Industries Pvt. Ltd. for the same. Please refer <b>Annexure-21 &amp; 22</b> .
p	The company shall undertake waste minimization measures as below.	
	Metering and control of quantities of active ingredients to minimize waste.	Waste reduction planning in coordination with in house Process Excellence lab will be done as part of waste elimination .The quantity of ingredients are as per process flow chart which is prepared by R&D team. Process flow chart attached as <b>Annexure-50</b> .
	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes	We have well developed solvent recovery plant for reuse of byproduct as raw materials or as raw material substitutes in other processes.Photographs of SRP attached as <b>Annexure-51</b> .
	Use of automated filling to minimize spillage	We have provided closed handling system for transferring of chemicals. Photographs attached as <b>Annexure-20</b> .Powder handling automation also considered.
	Use of close feed system into batch reactors.	Facility of solvent and chemical transfer through pumps and close piping with auto control system.Please refer <b>Annexure-20</b> for the sam.
	Venting equipment though vapor recovery system.	All vents through condensing unit only. Please refer <b>Annexure-52</b> for photograph of condensers.
	Use of high pressure nozzles for equipment cleaning to reduce waste water generation	We have provided high pressure pump for equipment cleaning for the same.
<b>G</b>	<b>Green Belt</b>	
i	Out of 1,02,911 sq . M area 29,523 sq meter (28%) area will be covered with the good green belt and 4,298 tree .will be planted .The green belt of 5m width will be	We have planted 5800 no. of trees of different species like Neem, Peepal, Kadam and kachnaar in surrounding periferi of company

	developed mainly along the periphery and road side .Selection of plant species shall be as per the CPCB guide lines in consultation with the state Forest Department additionally 55,790 m2 or 5.579 Ha area of DIC is being proposed on nearby plot for development of greenbelt.	premises. Photographs of plantation attached as <b>Annexure-29</b> . Apart from this 2 nos Garden development having approx area 45000 M2 and 30000 M2 are taken from local administration . Second of 30000 M2 work is under progress.
ii	As proposed 100 trees are to be uprooted for which permission of competent authority shall be obtained and additional 10 times plantation shall be carried out .	Noted and will take up if any . We have designed our layout according to available space without cutting any existing tree.
iii	Peripheral plantation all around the project boundary shall be carried out using tall saplings of minimum 2 meter height of species which are fast growing with thick canopy cover preferential green nature .pp will also make necessary arrangements for the causality replacement and maintenance of the plants.	We have planted saplings all around the boundary and the periphery and the height of the plants is approx. 2 meters. We have planted approx 1200 plants as replacement. We have provide drip irrigation system for plants. We have hired 3 nos of contractual persons for maintenance of green belt area. Photogharphs attached as <b>Annexure-29</b> .
iv	PP shall explore the possibility of planting additional 1000 trees along the banks of Naghdhavan Nallan Under CER with the help of local administration .	We are checking feasibility with respect to available land near by Nagdhaman river for saplings. We are planning for plantation in starting of monsoon season of next FY 2023-24.
<b>H</b>	<b>Safety public hearing and Human health issues</b>	
i	Emergency Preparedness plan based on the hazard identification and Risk Assessment (HIRA) and Disaster management plan shall be implemented	We have obtained Onsite Emergency plan. Certificate attached as <b>Annexure-31</b> . We have also attached copy of Offsite disaster management Plan attached as <b>Annexure-32</b> and Risk management plan for product attached as <b>Annexure-33</b> .
ii	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	Fire fighting system comprising water storage tanks 1200 KL and jockey pump/main electrical pump /Diesel engine driven pump also installed . complete ring system of hydrant piping and monitors installed all around the plant premises. We conduct Fire drill and fire fighting training time to time as awareness program to the employees.
iii	The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Yes, PPEs. are provided to all employees. We provides safety shoes, helmets. Safety goggles, ear plug, ear muff, safety harness, SCBA set, cartridge mask, full body suit, air respiratory suit gumboot etc. To employees and workers. As per our corporate guideline without safety shoes and helmet no body can enter company premises photographs attached as <b>Annexure-54</b> .
iv	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and	Induction training at the time of joining and regular training periodically also being

	routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	provided. Medical checkup at time of joining and periodically medical check up is being done as per schedule. List of employees examined during the compliance period is attached as <b>Annexure-68</b> . Also we conduct awareness training programs time to time for all the employees and contract workers. Photographs of the same attached as <b>Annexure-55</b> .
v	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Temporary residence along with water, electricity and mobile toilet facilities were provided to the workers in project phase. Also we had provided medical care, drinking water and other necessary things. Photographs to be collect from civil dept <b>Annexure-56</b> .
vi	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Centre facility provided in site premises as per factory act and health check up of each employees conducted on yearly basis. Photographs of OHC facility attached as <b>Annexure-57</b> . List of employees examined during the compliance period is attached as <b>Annexure-69</b> .
vii	There shall be adequate space inside the Plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	We have provided parking inside the company for employees as well for outside vehicles carrying raw material /FG . Photographs attached as <b>Annexure-58</b> .
<b>I</b>	<b>Corporate Environment Responsibility</b>	
i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	Being complied.
ii	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The Environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviations/ violation of the environmental / forest / wildlife norms / conditions and or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF & CC as a part of six-monthly report.	Noted. Approved policy on Environment ,Health and Safety is being displayed . Photographs attached as <b>Annexure-59</b> . Copy of Board Resolution attached as <b>Annexure-60</b> .
iii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Well established Organogram for complete EHS function is in place . Committee comprising managing director ,Executive director ,presidents and plant heads. Environment Management cell &

		Organogram Attached as <b>Annexure-61.</b>
iv	Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.	We are maintaining separate fund allocation to the CSR/CER.
v	The proposed EMP capital cost is Rs.2157 lakhs and 871.05 lakhs/year as recurring cost and out of which the Environment monitoring Cost for the project is 110 lakhs and Rs.12.05 lakhs is proposed for green belt development.	Green belt development is as per stated norms.
vi	Under CER activity, Rs.487.5 lakhs in 5 years are proposed for different activities.	Noted and We have Attached CER details as <b>Annexure-8.</b>
vii	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Green belt development is as per stated norms. We have attached capital & operating expense incurred towards implementation of EMP as <b>Annexure-62.</b>
viii	Self environmental audit shall be conducted annually.	Noted and will be done by Corporate EHS team.
<b>J</b>	<b>Miscellaneous</b>	
i	PP shall be responsible for discrepancy (if any) in the submission made by the PP to SEAC & SEIAA.	Noted
ii	The project authorities must strictly adhere to the stipulations made by the MP Pollution Control Board and the state government.	Noted
iii	The project proponent shall abide by all the commitment and recommendation made in the EIA/EMP report, commitment made during public hearing and also that during their presentation to the Expert Appraisal committee.	Noted and complied
iv	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and climate change (MoEF&CC)	Noted
v	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.	Noted and shall be complied
	<b>Standard Conditions:</b>	
1	The company shall carry out the HAZOP study and the	We have performed HAZOP Study and the

	report shall be submitted to Regional Office of MoEF, Gol at Bhopal.	report submitted ministry MoEF & CC Regional Office, Bhopal. Copy of HAZOP attached as <b>Annexure-8</b> .
2	The company shall comply with the EREP guidelines prepared by MPPCB for Bulk Drug Plants.	We prepare the response after understanding the EREP guideline. <b>Annexure-63</b> attached for the same.
3	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixings of accidental spillages with domestic waste and storm drains.	Separate spill collection pit made available to avoid mixings of accidental spillages with domestic waste and storm drains. We are using spill control pallets and for transferring of materials. Photographs attached as <b>Annexure-63</b> .
4	Industry should get the Emergency Disaster Management Plan approved by DTHS and should also comply with the provisions made in Public Liability Insurance Act, 1991.	We have obtained Onsite Emergency plan. Certificate attached as <b>Annexure-23</b> .
5	All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.	We are conduct environmental monitoring quarterly. We have attached monitoring report for given compliance period as <b>Annexure-14</b> .
6	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Regional office of the Ministry of Environment and Forest, Bhopal and MP PCB.	Noted.
7	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained (as and when applicable), by the project proponent from the respective competent authorities.	We are complying. We have obtained Fire NOC, PESO license, Factory license. Copies attached as <b>Annexure-7, Annexure-37 and Annexure-64</b> .
8	The Regional Office, MoEF, Gol, Bhopal and MP PCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, should be given to Regional Office, MoEF, Gol, Bhopal and MP PCB.	Noted and already submitted at the time of approval.
9	A copy of the environmental clearance shall be submitted by the project Proponent to the Heads of the Local Bodies, Panchayat and Municipal Bodies as applicable' addition to the concerned Government Departments / organization responsible for controlling the proposed projects who in turn has to display the same for 30 days from the date of receipt. The project proponent has to strictly follow directions/guideline issued by the MoEF, Gol, CPCB and other Govt. agencies from time to time.	EC copy already submitted to concern dept. Also has been displayed in two news papers. Photographs attached as <b>Annexure-65</b> .
10	The Project proponent has to strictly follow directions /guideline issued by the MoEF, GoI, CPCB and other govt. Agencies from time to time.	Noted and shall be complied
11	The Project Proponent shall advertise at least in two local newspapers widely circulated one of which shall be in the	We have complied. Photographs attached as <b>Annexure-65</b> .



	vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the State Level Environment Impact Assessment Authority (SEIM) website at <a href="http://www.mpseiaa.nlc.in">www.mpseiaa.nlc.in</a> and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal and MP PCB.	
12	The Project Proponent has to upload soft copy of half yearly compliance report of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year on MoEF & CC web portal <a href="http://www.environmentclearance.nic.in/">http://www.environmentclearance.nic.in/</a> or <a href="http://www.efclearance.nic.in/">http://www.efclearance.nic.in/</a> and submit hard copy of compliance report of the stipulated prior environmental clearance terms and conditions to the Regulatory Authority also.	we are complying. We have uploaded half yearly EC compliance report for the period of June'2022 on Parivesh portal of MoEF & XGN portal of MPPCB. Screen shot attached as <b>Annexure- 66</b> . Also we have sent hard copy of EC compliance report, June22 to MPPCB, MoEF and SEIAA We are submitting half yearly EC compliance report for December'2022.
13	The SEIAA of M.P. reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted
14	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006:	Noted and being complied
15	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted
16	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted and shall be complied
17	Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted
18	The prior Environmental Clearance granted for the project is valid for a period of seven years as per EIA notification dtd. 14.09.2006 & its amendments.	Noted and shall be complied
19	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	We have uploaded the six monthly compliance report of EC on the company website. Please refer <b>Annexure-67</b> .

	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.	
20	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently , shall also be put on the website of the company along with the status of compliance of EC conditions and shall be sent to the Regional Office of MoEF.	We have complied. We have submitted the Environmental Statement (Form-V)for FY 2021-22 to MPPCB. Please refer <b>Annexure-49</b> .

**LIST OF ANNEXURES**

<b>Sr. No.</b>	<b><u>Annexure</u></b>
1	EC Copy
2	Copy of Water Agreement
3	ZLD Photographs
4	HT Agreement
5	RWH Photos
6	RWH Design
7	Fire NOC
8	CER Status
9	TSDF Agreement
10	Bag Filter Photographs
11	Boiler Stack Photograph
12	DG Stack Photograph
13	Stack Monitoring Report
14	Ambient Air Monitoring Report
15	RCC Road, Ash Storage area & APH & Cyclone
16	Scrubber
17	Covered Truck
18	HAZOP Study
19	Child Brine Plant & Condenser
20	Closed Chemical Handling System
21	GGEPI Agreement Copy

22	Hazargo Agreement Copy
23	KGN Traders
24	Hazardous Chemical storage
25	Dyke wall of storage Tanks
26	Spill Kit
27	Spill Control Pallet
28	Green Belt Layout plan
29	Green Belt Photographs
30	RCC Road diversion to save tree
31	OSEP Approval receipt
32	Offsite Disaster mangt. Plan-Dewas
33	Risk Management Plan
34	Solar Lights
35	CER Activity Proof
36	CTO Copy
37	PESO License
38	MVA Checklist
39	Road Safety SOP
40	CAAQMS
41	Noise Monitoring
42	LED Lights
43	Fire Fighting System
44	Hazardous Waste Storage Yard Floor
45	Plinth Height of Hazardous Waste Storage Yard
46	Hazardous Waste Storage Yard Floor slop & Collection Pit

47	Hazardous Waste Storage Yard Spill Control Kit
48	Hazardous Waste Storage Yard Spill Control Kit
49	Dyke Wall for Storage Tanks
50	Process Flow Diagram Etodolac
51	Solvent Recovery Plant Photograph
52	Condenser for Vent
53	Hazardous Waste Handling SOP
54	Personal protective Equipments
55	Training Photographs
56	Civil Workers facility
57	Occupational Health Centre Photographs
58	Parking Photograph
59	EHS Policy Display
60	Board Resolution
61	EHS Organogram & Environment Cell
62	EMP
63	EREP
64	Factory Licence Ipca Dewas
65	Advertisement in Local Newspaper
66	EC Compliance uploaded on Parivesh Portal & XGN
67	EC & EC Compliance uploaded on Company website
68	Form-V on XGN
69	Employees Medical checkup List

## ANNEXURE-1



### **State Environment Impact Assessment Authority, M.P.** (Ministry of Environment, Forest and Climate Change, Government of India)

#### **Environmental Planning & Coordination Organization**

Paryavaran Parisar, E-5, Arera Colony  
Bhopal - 462016

visit us <http://www.mpseiaa.nic.in>

Email : [mpseiaa@gmail.com](mailto:mpseiaa@gmail.com)

Tel.: 0755 - 2466970, 2466859

Fax : 0755 - 2462136

No: 454 /SEIAA

Date: 27.10.20

#### AMENDMENT

To,  
Shri Manoj Kumar Mittal, Vice President - EHS (Corporate)  
M/s IPCA Laboratories Ltd.  
Post Box No.33, Village-Sejavta  
District-Ratlam (MP)- 457002

**Sub:-Case No. 6537/2019** : Amendment in Environment Clearance for Proposed Project by M/s Ipca Laboratories Limited at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas, MP. Total plot area ~102911 sq.m. Proposed Capacity of Intermediate, API, API- Oncology and R & D Products will be 5017.7 TPA. Non-EC products like Tablets and Injection will be 250 Lac per Annum by M/s Ipca Laboratories Ltd. through Vice President - EHS (Corporate) Manoj Kumar Mittal, C-89 to C-95 MIDC Area, MIDC Mahad, Dist. Raigad (Maharashtra) Mobile No.: 9300036263(M), E-mail: [manojkumar.mittal@ipca.com](mailto:manojkumar.mittal@ipca.com)

**Ref:** Online application SIA/MP/IND2/177397/2020 dtd.03.10.20 for amendment received in SEIAA office 05.10.20.

- (1) The Prior Environmental Clearance under EIA Notification, 2006 & its amendments has been issued (vide letter No. 1095/SEIAA/2020 dated 18.8.2020) for the proposed production capacity of intermediates, API, API-Oncology and R&D Products at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas, MP. Total plot area ~102911 sq.m. Proposed Capacity of intermediate, API, API- Oncology and R & D Products - 5017.7 TPA. Non-EC products like Tablets and Injection - 250 Lac per Annum Clinker grinding unit (2 x2 MTPA) of Wonder Cement Limited at Village-Kherwas, Teshil-Badnawar, District. Dhar,(M.P.).
- (2) The Proponent has applied Online application SIA/MP/IND2/177397/2020 dtd.03.10.20 for amendment received in SEIAA office 05.10.2020. PP has requested for Amendment in EC (Pt. No. (iii) & (vii) regarding inclusion of additional land acquired i.e. 16A, 16B, 17A, 17B, 18A, 18B, 20C & 21C adjacent to the project area i.e. Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas, MP.
- (3) Further PP submitted that additional land purchased for better arrangement and operational facility of overall EMS. PP assured that there shall be no change in product



as well environmental profile and No any production related activity increase due to this amendment. Amendment is required for addition of new land area for ETP and proper storage of hazardous chemicals Finished Goods, Raw Material etc. Summary of existing Land Area and proposed addition is summarized in below table.

Reference of approved EC	Earlier Environmental clearance issued	Proposed Amendment
Pt. no. (iii) of EC letter	The proposed project is a Greenfield project for establishing plant having EC and Non-EC products at Plot no. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22, industrial Area No. 1, Dist. Dewas, Madhya Pradesh.	The proposed project is a Greenfield project for establishing plant having EC and Non-EC products at <b>Existing</b> Plot no. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 and <b>Proposed Plot no. 16A, 16B, 17A, 17B, 18A, 18B, 20C &amp; 21C</b> , industrial Area No. 1, Dist. Dewas, Madhya Pradesh.
Pt.no. (vii) of EC letter	The project occupies a plot area of 102911 sq.m of land. PP has submitted copy of amended lease deed dtd. 17.05.2019 which is executed between District Trade & Industries Center, Dewas Ltd. and Ipca Laboratories Ltd. for the said project.	The project occupies a plot area of 102911 sq.m of land <b>as per EC letter</b> . Proposed addition of <b>56405 sq. m.</b> and total area after amendment will be tune around <b>159316 sq. m.</b> PP has submitted copy of lease deed of new plots.

The case was discussed in 643<sup>rd</sup> SEIAA meeting dtd 06.10.2020 and decided to issue an amendment in EC letter (**letter No. 1095/SEIAA/2020 dated 18.6.2020**) as follows:

Pt. no. (iii) of EC letter

*"The proposed project is a Greenfield project for establishing plant having EC and Non-EC products at **Existing** Plot no. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 and **Proposed Plot no. 16A, 16B, 17A, 17B, 18A, 18B, 20C & 21C**, industrial Area No. 1, Dist. Dewas, Madhya Pradesh".*

Pt.no. (vii) of EC letter

*"The project occupies a plot area of 102911 sq.m of land **as per earlier EC letter**. After amendment it will be tune around **159316 sq. m.**"*

The amendment should be read along with the original EC issued to PP and all the conditions mentioned in the prior EC vide letter No. 1095/SEIAA/2020 dated 18.6.2020 shall remain the same.

(Tanvi Sundriyal)  
Member Secretary

45-22  
Endt No. / SEIAA/ 2020  
Copy to:-

Dated 27/10/2020

- (1). Principal Secretary, Urban Development & Environment Deptt. 3<sup>rd</sup> Floor, Mantralaya Vallabh Bhawan, Bhopal.
- (2). Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.

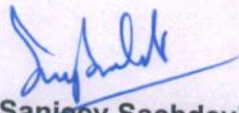
Case No. 6537/2019

Issued vide letter no.

Case No. 128304-Ipca Laboratories Limited accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.



- (3). Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- (4). The Collector, District Dewas, M.P.
- (5). Managing Director, M.P. Audyogik Kendra Vikas Nigam (Indore) Limited, Free Press House First Floor, 3/54 Press Complex, Agra-Mumbai Highway Indore(M.P).
- (6). District Trade & Industries Center, Dewas Ltd.
- (7). Director, I.A. Division, Monitoring Cell, MoEF, GoI, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110 003
- (8). Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- (9). Guard file.

  
(Dr. Sanjeev Sachdev)  
Officer-in-Charge

oy





**State Environment Impact Assessment Authority, M.P.**  
(Ministry of Environment, Forest and Climate Change, Government of India)

**Environmental Planning & Coordination Organization**

Paryavaran Parisar, E-5, Arera Colony

Bhopal - 462016

visit us <http://www.mpseiaa.nic.in>

Email : [mpseiaa@gmail.com](mailto:mpseiaa@gmail.com)

Tel.: 0755 - 2466970, 2466859

Fax : 0755 - 2462136

To,

Shri Manoj Kumar Mittal, Vice President - EHS (Corporate)  
M/s IPCA Laboratories Ltd.  
Post Box No.33,Village-Sejavta  
District-Ratlam (MP)- 457002

No.:

1095 /SEIAA/ do

Date:

18.6.2020

**Sub:- Case No. 6537/2019** : Prior Environment Clearance for Proposed in production capacity of intermediates, API, API-Oncology and R&D Products at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas, MP. Total plot area ~102911 sq.m. Proposed Capacity of intermediate, API, API- Oncology and R & D Products - 5017.7 TPA. Non-EC products like Tablets and Injection - 250 Lac per Annum by M/s Ipca Laboratories Ltd. through Vice President - EHS (Corporate) Manoj Kumar Mittal, M/s IPCA Laboratories Ltd. Post Box No.33,Village-Sejavta District-Ratlam (MP)- 457002 Mobile No.: 9300036263 (M), E-mail: [manojkumarmittal@ipca.com](mailto:manojkumarmittal@ipca.com) Env't. Consultant: Kadam Environmental Consultants

**Ref:** Your application dtd. 27.09.19 received in SEIAA office on 28.09.2019

With reference to the above, the proposal has been appraised as per prescribed procedure & provisions under the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14<sup>th</sup> September 2006 and its amendments, on the basis of the mandatory documents enclosed with the application viz., Form I, pre-feasibility report, ToR, EIA Report, ppt. and additional clarifications furnished in response to observations by the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- (i) IPCA is a one of the world's largest manufacturers of APIs -Atenolol(anti-hypertensive), Chloroquine Phosphate (anti-malarial), Furosemide(diuretic), HydroxychloroquineSulphate(NSAID), Metoprolol Succinate (anti-hypertensive), Metoprolol Tartrate(anti-hypertensive) and PyrantelSalts (anthelmintic) -besides being one of the largest suppliers of these APIs worldwide.
- (ii) Ipca already have plants in M.P. at Ratlam, Indore & Pithampur. Two of the products proposed to be produced at the Dewas Plant will be Chlorquine Phosphate & HydroxyChloroquine & their intermediate 4-7 DCQ. These products are considered to be one of the key drugs in the fight against COVID-19.
- (iii) The proposed project is a Greenfield project for Establishing plant having EC and Non-EC products at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22, Industrial Area No. 1, Dist. Dewas, Madhya Pradesh.

Case No. 6537/2019

Issued vide letter no. .... dated .....

Case No.: To be quoted in registered cases for correspondence

1 of 15



- (iv) The total production capacity is given in following table:

<b>Details of Proposed Products Requiring EC</b>			
S. No.	Type of Product	Name of Products	Total Production Capacity (T PA)
1	Intermediate	4,7-Dichloroquinoline (4,7 DC Q ), 3- Aminopyrazole-4- carboxamide (3 APC ), 2-Butyl-4-Chloro-5-Formyl Imidazole (BC FI), OTBN, MEP, HNDA, NDA, Lasamide, DSA , M V -1 HC I, C PSP, MKI, RoBo 7, Clopi-II, AABO, 4-HOK, PTU, 4-TBD, 4-HBS, Ritaniic acid	2,200
2	API	Allopurinol, Amlodipine Besylate, Amodiaquine Base, Amodiaquine HCl, Aripiprazole, Atovaquone, Bezbromorone, Bupropion, Chloroquine phosphate, Chloroquine sulphate, Chlorothalidone, Duloxetine, Escitalopram, Etodolac, Famotidine, Flumequine, Gliclazide, Hydroxy Chloroquine sulphate, Lamotrigine, Levofloxacin, Lumefantrine, Valsartan, Metaclopramide HCl, Nifedipine, Ondansetron, Piperaquine Phosphate, Pregabalin, Primaquine Phosphate, Proguanil Base, Telmisartan, Trazadole, Losartan Potassium, Fursemede	2,800
3	API- Oncology	Baricitinib, Muthotrexate, Tofacitinib, Upadacitinib	7.5
4	R & D Products		10
<b>Total Production Capacity</b>			<b>5,017.5</b>

<b>Details of Proposed Non-EC Products</b>		
S.No.	Name of products	Total Production Capacity (T PA)
1	Tablets	200 Lac
2	Injections	50 Lac

- (v) The proposed project is covered under 5 (f) category (B) of the schedule of EIA Notification issued by the Ministry of Environment & Forests vide S.O.1533 (E), dtd. 14.09.2006 and its amendments, hence is required to obtain prior EC. In the context of pandemic COVID -19, Govt's MoEF&CC issued a OM vide dated 13.04.2020, for considering the API & Bulk drug Projects as B-2 category.
- (vi) There is no interstate boundary within 10 km and no National Park / Sanctuary within the 5 km of the project area hence the general conditions are not attracted.
- (vii) The project occupies a plot Area of 102911 sq.m of land. PP has submitted copy of amended lease deed dtd 17.05.2019 which is executed between District Trade & Industries Center, Dewas Ltd. and Ipca Laboratories Ltd. for the said project .
- (viii) Total Water requirement will be 1188 KLD from that fresh water requirement will be 712 KLD and 476 KLD will be the recycled water. Water will be sourced through Dewas Water Project Works Private Limited (formerly known as Anjar Water Solution Pvt. Ltd.) water supply. PP has submitted copy of consent letter dtd. 30.08.19 issued by Dewas Water Project Works Private Limited.



- (ix) The total wastewater generation will be 501 KLD. From that 476 KLD will be recycled back and 5KLD will be MEE salt and 20 KLD Losses in the ETP including leakages & sludge with moisture. Industrial wastewater will be treated in ETP followed by RO & MEE & treated water will be completely recycled and reused in cooling tower make up water. The domestic sewage will be treated separately in STP at site and treated sewage will be reused for gardening after quality matching with standard norms for on land irrigation given by PCB/CPCB.
- (x) The main source of air pollution are Flue Gas Stack:8 Nos. (2 Boiler of 20 TPH + 2 Boiler of 6 TPH + 2 Thermic fluid heater + 2 DG Set of 1000 kVA each).PP has proposed Mitigation measures for air quality impacts are:
- In the standby stacks of boiler & thermic fluid heater PNG will be used. And for working stack of boiler and thermic fluid heater coal consumption is reduced to 50%.
  - Proper air pollution control equipment will be provided which will meet the stipulated norms provided by MPPCB/CPCB.
  - Multiple, sequential cyclones followed by state of the art bag filters with efficiency > 97.8% will be provided to meet SPM emission standards.
  - AFBC based boiler will be installed, in which lime dosing will be done to reduce SO<sub>2</sub> emissions (reduction efficiency > 75%).
  - Effective water spraying will be done on the access roads to control re-entrained dust during dry season (if required);
  - Proper operating procedures will be followed during startup and shutdown;
  - Proper PPE like dust masks will be provided to workers and its use ensured;
  - Regular Work place monitoring will be done;
  - LDAR program will be conducted regular.
- (xi) PP has proposed following mitigation measures will be implemented to reduce surface water related impacts:
- Fresh water demand will be reducing by proposing zero liquid discharge system. Treated water will be completely reused in plant.
  - No discharge of untreated waste water on land to avoiding leakages;
  - Separate drainage for storm water and effluent will be provided to avoid any contamination of surface water sources;
  - All chemical and fuel storage and handling areas will be provided with proper bunds to avoid run-off contamination during rainy season.
  - Solid Wastes will be properly handled in closed containers and properly stored in hazardous waste storage areas as per rules having suitable lining and also bunding for overflow of spillage waters which can contaminate the surroundings.
  - Ash generated from the boiler will be stored properly and sold to nearest cement or brick manufacturing industries.
- (xii) Hazardous waste generated from the proposed project will be in the form of used / spent oil which will be sold to authorised recyclers. MEE Sludge will be sent to TSDF, Pithampur for safe disposal and spent catalyst will be sold to actual reusers. These wastes will be collected, stored properly and will be send to relevant vendors / recyclers / reprocessors. The other solid waste like coal ash will be sent to briquette manufacturer. PP has submitted Acceptance letter for co-processing for cement kiln with J K Cement plant and agreement for co-processing with UltratechCement. Acceptance letter of TSDF, Pithampur and willingness letter for pre-processing of hazardous waste from GEPIL also submitted by PP.



- (xiii) The power requirement of 3500 kVA shall be met from Madhya Pradesh Paschim Kendra Vidyut Vitaran Company Ltd. There will be two proposed DG sets of 1,000 KVA which will be operated only during power failure. For energy Conservation PP has proposed as follows:-
- Energy efficient machineries like AHU, Centrifuge, Reactor, ETP and motors will be used during operation phase. Installation of economizer & high efficiency burner on steam boilers.
  - Using water cooled chillers, variable frequency drives for secondary pumps and public area and building management system for HVAC equipment with non-CFC and non-HCFC based refrigerants.
  - Modification of HVAC System to re-circulation type form once through system to reduce the power consumption & Stoppage of HVAC system during no production time.
  - Energy efficient lubricant oil for planetary gear boxes.
  - Gravity flow will have preferred wherever possible to save pumping energy.
- (xiv) For rainwater harvesting calculations, areas like process and storage, Godown, scrap yard etc. are excluded due to having chances of contamination. Runoff water generated from Roof Top (admin block, Utility, canteen, security, Warehouse) will be used to store rainwater for water conservation.
- (xv) For Fire Protection PP has proposed to protect the plant by means of different fire protection facilities and consist of
- Hydrant system for exterior as well as internal protection of various buildings/areas of the plant.
  - Portable extinguishers and hand appliances for extinguishing small fires in different areas of the plant.
  - Water cum foam monitor to be provided in bulk fuel storage area.
  - Fire water pumps. Two (2) independent motor driven pumps each of sufficient capacity and head are proposed for the hydrant systems which are capable to extinguish Fire or cooling purpose.
  - Smoke & fire detection system along with water & foam sprinkler system will be provided. During installation NBC guideline will be followed. NOC from fire department will be obtained.
  - For fire fighting adequate width road and turning is considered for movement of fire tender
- (xvi) The proposed site has already 217 well developed trees of ten species but out of these, approximate 40% i.e. 87 trees are likely to be cut with prior approval from concerned authority and 130 trees will be retained.

28% greenbelt will be developed at site and additional 55,790 sq.m. or 5.579 ha area is being proposed on nearby plot for development of greenbelt. PP has submitted Allotment letter from DIC for Additional Greenbelt Area.

To fulfill the standard of 33% green area of total plot area, additional 4.3% i.e. 4425.17 m<sup>2</sup> with a total plantation of 664 trees will be provided. However, 55,790 m<sup>2</sup> or 5.579 Ha area (instead of 4,425.17 m<sup>2</sup> i.e. 4.3% of total plot area) is being proposed on nearby plot for development of greenbelt with a total plantation of 8369 trees Overall plantation of 12,667 trees (4298 trees at site + 8369 trees on adjoining plot) of various species is planned to reduce the overall impact in surrounding environment due to the proposed project.



- (xvii) The unit will spend INR 4.875 Crore for 5 years (i.e. 1.5% of project cost ~ INR 325 Crores as per the OM dated May 1, 2018) for undertaking the Corporate Environment Responsibility (CER) activities in study area as shown in Table:

S.No.	Activities	Budget in %	Budget Amount (INR in crores)
1	Education	30%	1.462
1.1	Education and training for COVID 19		
1.2	ITI Training Program		
1.3	Infrastructure development (renovation of building, furniture, classrooms, CCTV, paver blocks, shed, library, water storage tank etc.)		
1.4	Uniforms		
1.5	Computers		
1.6	Sports Kit		
1.7	Water filter with cooler		
2.	Health and Hygiene	15%	0.7312
2.1	Community Toilets		
2.2	Medical Camps		
2.3	Veterinary Camps		
2.4	Hospitals/Clinic		
3	Safe Drinking Water	15%	0.7312
3.1	Water Tank		
3.2	Bore Well		
3.3	RO Plant		
4	Infrastructure développment /facilities	25%	1.218
4.1	Construction/ repair and maintenance of public buildings/utilities like community hall, drainage system, panchayat building, renovation of primary health centre etc		
4.2	Solar Street light		
5	Skill Development	10%	0.4875
5.1	Skill Development Programme		
6	Plantation in community areas	5%	0.2437
	<b>Total</b>	<b>100%</b>	<b>4.875</b>

Based on the information submitted at Para i to xvi above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 618<sup>nd</sup> meeting held on 11.06.2020 and decided to accept the recommendations of 434<sup>th</sup> SEAC meeting held on dtd. 20.05.20

Hence, Prior Environmental Clearance is accorded under the provisions of EIA notification dtd. 14<sup>th</sup> September 2006 & its amendments for the Proposed in production capacity of intermediates, API, API-Oncology and R&D Products at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas, MP. Total plot area ~102911 sq.m. Proposed Capacity of intermediate, API, API- Oncology and R & D Products - 5017.7 TPA. Non-EC products like Tablets and Injection - 250 Lac per Annum by M/s Ipca Laboratories Ltd. through Vice President - EHS (Corporate) Manoj Kumar Mittal, M/s IPCA Laboratories Ltd. Post Box No.33,Village-Sejavta District-Ratlam (MP)- 457002 subject to the compliance of the Standard Conditions and the following additional Specific Conditions as recommended by SEIAA & SEAC in its meetings.

**A. Specific Conditions as recommended by SEIAA**

1. The entire demand of fresh water should be met through Dewas Water Project Works Private Limited as committed in letter dtd. 30.08.19
2. Fresh water should not be used for Irrigation and gardening purpose.
3. **Waste water:**
  - (a) PP should ensure "Zero effluent discharge" from the unit by 100% recycling. The water softening reject, boiler blow down reject and cooling blow down will



be treated in ETP. Further treated waste water will go through the RO and finally re used/recycled in the process and unused waste water evaporate in MEE.

- (b) RO and MEE should be provided for treatment of high COD waste streams and only in case of emergency/breakdown high COD wastes should be disposed off through CTSDF, Pithampur, Dhar.

#### 4. For Air Pollution:

- (a) PP should ensure install Bag house in stack for control of air pollution and stack height as proposed in the EIA/ EMP.
- (b) The performance of air pollution control system should be regularly monitored and maintained.
- (c) PP should ensure regular Stack monitoring & Ambient air quality monitoring and should be carried out as per the guidelines/norms of MPPCB/CPCB.
- (d) In plant control measures for checking fugitive emission from all the vulnerable sources shall be provided. Fugitive emission shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator/bag filters and water sprinkling system.
- (e) Dust suppression system including water sprinkler system/ fogging arrangement shall be provided at loading and unloading areas to control dust emission.
- (f) Fugitive emission in the work zone environment, product, raw material storage areas etc. shall be regularly monitored.
- (g) High efficient four stage ventury scrubber should be provided.
- (h) Transportation of raw material and finished goods should be carried out in covered trucks.
- (i) Company shall carry out the HAZOP study and report shall be submitted to ministry MoEF & CC Regional Office, Bhopal.
- (j) For control of fugitive emission and VOCs following steps should be followed:-
- Chilled brine circulation system shall be provided and it should be ensured that the solvent recovery efficiency is not be less than 95%.
  - Reactor and solvent handling pump shall be provided with mechanical seal to prevent leakage.
  - Closed handling system should be provided for chemicals.
  - System of leak detection and repair of pump/pipeline should be based on preventive maintenance.
  - Solvent shall be taken from underground storage tank to reactor through closed pipeline. Storage tank shall be vented through trap receiver and condenser operated on chilled water.

#### 5. Hazardous Waste Management:

- (a) As proposed above, PP should ensure disposal of hazardous waste regularly and there should be no dumping of these materials in the premises/outside.
- (b) PP should ensure handling, disposal and management of hazardous waste as per the related prescribed rules.



- (c) PP should obtain Renewal of authorization regularly from MPPCB for collection storage and disposal of hazardous waste (Management, handling & transboundary Movement) Rules 2008 and its amendments. Membership of the TSDF should be renewed in time to time for hazardous waste disposal.
- (d) Hazardous chemicals should be stored in sealed tanks, drums etc. Flame arrestors shall be provided on tanks. To avoid the spillage from processing unit, Industry shall provide fully mechanized filling and packaging operation unit.
- (e) Ensure the transportation of raw / finished material only by covered vehicles.
- (f) Ensure the storage and handling of all the chemicals in a proper and safe manner to avoid any spillages and also to prevent runoff contamination in monsoon.
- (g) Ensure collection & treatment of spillages, if any.
- (h) All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of hazardous chemicals.
- (i) PP should ensure to implement the process as per Acceptance letter for co-processing for cement kiln with J K Cement plant and agreement for co-processing with Ultratech Cement.

**6. Green Belt Development:**

- (a) It is noted that the proposed site has already 217 well developed trees of ten species but out of these, approximate 40% i.e. 87 trees are likely to be cut. PP should ensure to obtain prior approval for cutting the existing trees.
  - (b) PP should ensure plantation as proposed 28% greenbelt of the total area. Plantation in the project area of indigenous local varieties like Neem, Peepal, Kadam and Kachnaar.
  - (c) Every effort should be made to protect the existing trees on the plot.
  - (d) Overall plantation of 12,667 trees (4298 trees at site + 8369 trees on adjoining plot) of various species is planned to reduce the overall impact in surrounding environment due to the proposed project as proposed.
  - (e) Green area including thick green-belt shall be developed in at least 33% of the plot area to mitigate the effect of fugitive emissions all around the plant in consultation with the forest department as per the guidelines of CPCB.
7. PP should obtain NOC /approval from competent authority for health & safety measure, Onsite & Offsite disaster management, and Risk management plan before commencing the operation of the unit.
  8. PP should obtain fire NOC from the competent authority before commencing the operation of the unit.
  9. PP should ensure installation of photovoltaic cells (solar energy) for lighting in common areas, LED light fixtures and energy efficient equipments.
  10. PP should ensure the implementation of CER activities to the extent of Rs. 4.875 Crore for 5 years as committed during presentation to the extent on regular basis in consultation with the Gram Panchayat of the receptive village.
  11. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition



with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.

12. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
13. Total quantity of runoff water generated and green belt area should be collected in underground tank & used for process in plant to minimize fresh water requirement.
14. PP should ensure to submit half yearly compliance report and CSR activity report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC, Gol, Bhopal) than prior environmental clearance issued to PP will automatically be treated as cancelled/ revoked as per OM No. 930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.

## **B. Specific Conditions as recommended by SEAC**

### **(A) Statutory compliance**

- i. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the Madhya Pradesh Pollution Control Board (MPPCB).
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time & permission of competent authority if ant tree falling is to be carried out.
- iii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

### **(B) Air quality monitoring and preservation**

- i. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- ii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released e.g. PM10 and PM2.5 in reference to PM emission and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each) covering upwind and downwind directions. The project proponent shall install one continous ambient air quality monitoring system in dewas industrial area and display its results through display board for public awareness. The location of this station shall be finalized in consultation with the regional officer, M. P. Pollution Control Baord, Dewas.
- iii. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal / / Bio Briquette for use in coal// Bio Briquette fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous



- emissions from the boiler, DG set and scrubber shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iv. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
  - v. The 2 DG sets (2nos.X 1000 KVA = 2000kVA) shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
  - vi. DG exhaust will be discharged at height stipulated by CPCB.
  - vii. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
  - viii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.

**(C) Water quality monitoring and preservation**

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- ii. As already committed by the project proponent Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- iii. 718 KLD water will be consumed from Dewas Water Project Works Private Limited (formerly known as Anjar Water Solution Pvt. Ltd.) water supply. The effluent shall (531 KLD) be segregated as high COD/High TDS and Low COD/Low TDS effluents and Sewage. The HCOD/HTDS shall be neutralized and sent to stripper followed by MEE and ATFD. LCOD/LTDS effluent shall be treated in ETP followed by RO / MEE system, domestic effluent shall be treated in STP. The treated effluent shall be entirely reused and recycled in cooling tower make-up /Boiler feed and treated sewage shall be used in gardening.
- iv. Adhere to 'Zero Liquid Discharge and No industrial effluent from the unit shall be discharged outside the plant premises. PP should also install Internet Protocol PTZ camera with night vision facility along with minimum 05X zoom and data connectivity must be provided to the MPPCB's server for remote operations.
- v. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the Madhya Pradesh Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- vi. Total fresh water requirement shall not exceed 718 KLD and as proposed Dewas Water Project Works Private Limited shall provide the fresh water.
- vii. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- viii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- ix. Dedicated power supply shall be ensured for uninterrupted operations of treatment systems.



**(D) Noise monitoring and prevention**

- i. Acoustic enclosure shall be provided to 2 nos. X 1000 KVA = 2000kVA sets for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

**(E) Energy Conservation measures**

- i. The energy sources for lighting purposes shall preferably be LED based.
- ii. The total power requirements for project will be 3500KVA. The power will be supplied by Power Generator i.e. Grid power (Madhya Pradesh Paschim Kendra VidyutVitaran Company Ltd.).

**(F) Waste management**

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Hazardous wastes such as
  - a) Process Residue & Waste, Spent Carbon, Date expired Products (0.5% of total production capacity), Off specification products (0.5% of total production capacity), Contaminated cotton Rugs and other cleaning material, Spent Filter media, Spent iron exchange resin, Spent / Waste Solvent from Process and ETP ZLD System, Any process or distillation residue, shall be directly sent to incineration at CHWIF at Pithampur or send for co- processing at authorized cement industry or Pre-processing.
  - b) Sludge / MEE salt from Wastewater Treatment Plant, Asbestos Sheet shall be directly sent to MPWMP for Disposal at Pithampur
  - c) Used Oil/ Spent oil, Process mother liquor, Corrosive waste acid / caustic lye, Spent catalyst shall be sent to authorized decontamination facility/ recyclers or reuse.
  - d) The Fly ash generated from boilers shall be stored in silos/ covered shed and disposed of through cement manufacturers by bulkers / closed containers and should comply with Fly Ash Utilization Notification, 1999 and as amended subsequently.
  - e) If any Flammable, ignitable, reactive and non-compatible wastes should be stored separately and never should be stored in the same storage shed.
  - f) Automatic smoke, heat detection system should be provided in the sheds. Adequate fire fighting systems should be provided for the storage area.
  - g) In order to have appropriate measures to prevent percolation of spills, leaks etc. to the soil and ground water, the storage area should be provided with concrete floor of inert material or steel sheet depending on the characteristics of waste handled and the floor must be structurally sound and chemically compatible with wastes.
  - h) Measures should be taken to prevent entry of runoff into the storage area. The Storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.



- i) The storage area floor should be provided with secondary containment such as proper slopes as well as collection pit so as to collect wash water and the leakages/spills etc.
- j) Storage areas should be provided with adequate number of spill kits at suitable locations. The spill kits should be provided with compatible sorbent material in adequate quantity.
- k) Recent MSDS of all the chemicals used in the plant be displayed at appropriate places.
- l) Proper fire fighting arrangements in consultation with the fire department should be provided against fire incident.
- m) All the storage tanks of raw materials/products shall be fitted with appropriate controls to avoid any spillage / leakage. Bund/dyke walls of suitable height shall be provided to the storage tanks. Closed handling system of chemicals shall be provided.
- n) Log-books shall be maintained for disposal of all types hazardous wastes and shall be submitted with the compliance report.
- o) Process organic residue and spent carbon, if any, shall be sent to cement industries for co-processing or for pre-processing. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- p) The company shall undertake waste minimization measures as below:
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c. Use of automated filling to minimize spillage.
  - d. Use of Close Feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.
  - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

**(G) Green Belt**

- i. Out of 1,02,911 Sq. m. area, 29,523sq meter (28%) area will be covered with the good green belt and 4,298 trees will be planted. The green belt of 5 m width will be developed mainly along the periphery and road side. Selection of plant species shall be as per the CPCB guide lines in consultation with the State Forest Department. Additionally 55,790 m<sup>2</sup> or 5.579 Ha area of DIC is being proposed on nearby plot for development of greenbelt.
- ii. As proposed 100 trees are to be uprooted for which permission of competent authority shall be obtained and additional 10 times plantation shall be carried out.
- iii. Peripheral plantation all around the project boundary shall be carried out using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. PP will also make necessary arrangements for the causality replacement and maintenance of the plants.
- iv. PP shall explore the possibility of planting additional 1000 trees along the banks of Naghdhavan Nallah under CER with the help of local administration.

**(H) Safety, Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.



- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

**(I) Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and or shareholders /stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.
- v. The proposed EMP Capital cost is Rs. 2157 Lakhs and 871.05 Lakhs /year as recurring cost and out of which the Environment Monitoring Cost for the project is 110 Lakhs and Rs. 12.05 Lakhs is proposed for green belt development.
- vi. Under CER activity, Rs. 487.5 Lakhs in 5 years are proposed for different activities.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Self environmental audit shall be conducted annually.



**(J) Miscellaneous**

- i. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- ii. The project authorities must strictly adhere to the stipulations made by the MP Pollution Control Board and the State Government.
- iii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- iv. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- v. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter.

**Standard Conditions:**

1. The company shall carry out the HAZOP study and the report shall be submitted to Regional Office of MoEF, Gol at Bhopal.
2. The company shall comply with the CREP guidelines prepared by MPPCB for Bulk Drug Plants.
3. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixings of accidental spillages with domestic waste and storm drains.
4. Industry should get the Emergency Disaster Management Plan approved by DTHS and should also comply with the provisions made in Public Liability Insurance Act, 1991.
5. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
6. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Regional office of the Ministry of Environment and Forest, Bhopal and MP PCB.
7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained (as and when applicable), by the project proponent from the respective competent authorities.
8. The Regional Office, MoEF, Gol, Bhopal and MP PCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, should be given to Regional Office, MoEF, Gol, Bhopal and MP PCB.



9. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and Municipal Bodies as applicable in addition to the concerned Government Departments / organization responsible for controlling the proposed projects who in turn has to display the same for 30 days from the date of receipt.
10. The project proponent has to strictly follow directions/guideline issued by the MoEF, GoI, CPCB and other Govt. agencies from time to time.
11. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the State Level Environment Impact Assessment Authority (SEIAA) website at [www.mpseiaa.nic.in](http://www.mpseiaa.nic.in) and a copy of the same shall be forwarded to the Regional Office, MoEF, GoI, Bhopal and MP PCB.
12. The Project Proponent has to upload soft copy of half yearly compliance report of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year on MoEF & CC web portal - <http://www.environmentclearance.nic.in/> or <http://www.efclearance.nic.in/> and submit hard copy of compliance report of the stipulated prior environmental clearance terms and conditions to the Regulatory Authority also
13. The SEIAA of M.P. reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
14. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
15. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
16. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
17. Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
18. The prior Environmental Clearance granted for the project is valid for a period of seven years as per EIA notification dtd. 14.09.2006 & its amendments.
19. 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.

20. 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 Regional Office of MoEF.

Endt No. 1096

SEIAA/ 2020

Dated 18.6.20

(Tanvi Sundriyal)  
Member Secretary

Copy to:-

- (1). Principal Secretary, Urban Development & Environment Deptt. 3<sup>rd</sup> Floor, Mantralaya Vallabh Bhawan, Bhopal.
- (2). Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.
- (3). Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- (4). The Collector, District Dewas, M.P.
- (5). Managing Director, M.P. Audyogik Kendra Vikas Nigam (Indore) Limited, Free Press House First Floor, 3/54 Press Complex, Agra-Mumbai Highway Indore(M.P).
- (6). District Trade & Industries Center, Dewas Ltd.
- (7). Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110 003
- (8). Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- (9). Guard file.

(Dr. Sanjeev Sachdev)  
Officer-in-Charge

Case No. 6537/2019

Issued vide letter no. .... dated .....

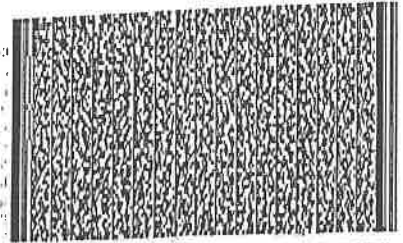
Case No.: To be quoted in registered cases for correspondence.

# **Annexure-2**

# **Water Agreement**



Registration and Stamp Department  
Madhya Pradesh



Certificate of Stamp Duty

E-Stamp Code		E-Stamp Details	
Total E-Stamp Amount	01011009092020001756		
Govt. Stamp Duty (Rs.)	100		
Janpad Duty (Rs.)	100	Municipality Duty (Rs.)	0
Exempted Amount(Rs.)	0	Upkar Amount (Rs.)	0
E-Stamp Type	NON-JUDICIAL		
Issue Date & Time	09/09/2020 11:41:20		
Service Provider or Issuer Details	MOHAMMED SOHEL, SHAIKH/SP011042804201700100.		
SP/SRO/DRO/HO Details	B,Block-03 Kanak Complex, First Floor Moti Bunglow Main Road DEWAS DEWAS		

Deed Type		Deed Details	
Deed Instrument	Copy or Extract		
Purpose	Copy or Extract, certified to be a true copy or extract by or order of an public officer under section 76 of the Indian Evidence Act 1872 (1 of 1872) and not chargeable under the law for the time being in force relating to court fees- One hundred rupees.		
	WATER AGREEMENT		

First Party Details	
Organization Name	Ipeca Laboratories Ltd.
Address	19A,19B,20A,20B,21A,22B and 22A Industrial Area No.1, A.B. Road, Dewas-455001-DEWAS Madhya Pradesh INDIA
Number of Persons	1

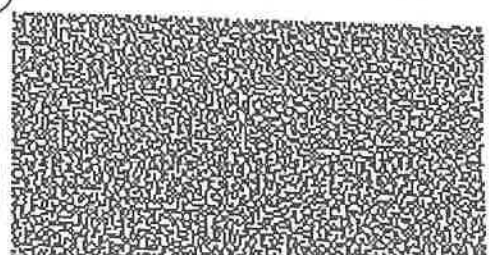
Second Party Details	
Organization Name	DEWAS WATERPROJECTS WORKS PVT LTD
Address	144, INDUSTRIAL AREA NO. 2, OPP. H&R JOHNSON, A.B. ROAD, DEWAS Madhya Pradesh INDIA
Number of Persons	1

WATER AGREEMENT

*U. S. Khan*  
Authorized Signatory,  
Devas Water Projects Works Pvt. Ltd.



Digitally signed by SOHEL  
SHAIKH  
Date: 2020.09.09 11:41:24  
IST





To,  
Director,  
M/S- Welspun Enterprises Limited,  
Dewas Waterprojects Works Pvt. Ltd.,  
Dewas - (M.P) - 455001.

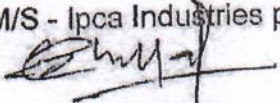
0) Nov 2021.

**Subject : - REQUIREMENT OF WATER SUPPLY AT IPCA, DEWAS**

Dear Mr. Vikas Tripathi ,

1. Reference is made, to our discussion on the subject as mentioned during your visit to the facility.
2. The enhanced requirement of water supply at our facility as of now would be 250 KL per day..
3. The requirement, would further increase upto 500 KL, next year end and as the project progresses.
4. You may arrange/initiate the process of pipeline and metering as required at your end for timely completion.
5. For information and requisite action.

For M/S - Ipca Industries pvt. Ltd.

  
Ipca, Dewas

Ipca Laboratories Ltd.

www.ipca.com

Plot 16 - 22, Industrial Area No.1, AB Road, Dewas 455 001 (Madhya Pradesh), India | T: +91 93032 78184  
Regd. Office: 48, Kandivli Industrial Estate, Kandivli (West), Mumbai 400 067 (Maharashtra), India | T: +91 22 6647 4444  
E: ipca@ipca.com CIN: L24239MH1949PLC007837

**ANNEXURE-3**

**ZERO LIQUID DISCHARGE PLANT**

**Effluent Treatment Plant**



**Reverse Osmosis Plant**



**Stripper**



**MEE Plant**



**ATFD Plant**







# FIRST SUPPLEMENTARY AGREEMENT FOR ADDITIONAL POWER

THIS Agreement is made this \_\_\_\_ day of \_\_\_\_\_ 2022 between the Madhya Pradesh Paschim Kshetra Vidyut Vitran Co. Ltd. West Zone Indore, being a Company registered under the companies Act 1956 having its registered office at G.P.H. Compound, Polo Ground Indore (hereinafter called the West Discom which expression shall where the context so admit include its permitted assigns) of the one part and M/s. IPCA Laboratories Ltd, being a company registered under Indian Companies Act having its registered office at 48, Kandivli Industrial Estate, Kandivli (West) Mumbai 400067 (Maharashtra), India. (hereinafter called the consumer which expression shall where the context so admits shall include his heirs, executors administrators, legal representatives, successors in business and assigns) of the other part ;

WHEREAS by an agreement dated 10.08.2021. (hereinafter referred to as the said agreement) made between the West Discom and the consumer, the West Discom has agreed to supply to the consumer electricity in bulk at Plot no. 19A-B/20A-B/21A-B/22, Industrial Area, No -1, A.B. Road, Dewas. (hereinafter referred to as the said premises) for his own use up to a maximum of 700 KVA during the terms of the said agreement on the terms and conditions therein contained.

AND WHEREAS upon application of the consumer, the West Discom has agreed to supply to the consumer at the said premises additional electricity not exceeding 450 KVA Over and above 700 KVA (Total 1150 KVA) on the same terms and conditions as contained hereunder.

AND WHEREAS, it is now necessary to amend the said agreement for the purpose of incorporating therein the said additional supply and the terms and conditions in respect thereof.

NOW THEREFORE this agreement witnesses and it is hereby agreed that the said agreement shall be amended as follows :-

The clause 1 (a) of the said agreement shall be substituted by the following sub clause namely :-

1(a) "Subject to the provision hereinafter contained and during the continuance of this Agreement the West Discom shall supply to the consumer and the consumer shall take from the West Discom all such electrical energy as the consumer shall require for the purpose of his own use and for the above mentioned purpose at his premises referred to above, upto a maximum of :-

- |   |   |
|---|---|
| (i) 700 KVA<br>(Seven Hundred KVA)                    | From the date of commencement of the H.T. agreement dated 10.08.2021.   |
| (iv) 1150 KVA<br>(One Thousand One Hundred Fifty KVA) | w.e.f. a date which shall be intimated by West Discom EE of the area area by Giving atleast 30 days advance Notice in writing if existing ME's Capacity is compatible for enhanced power and, other wise take further action for Higher ME installation accordingly. or from a date after issue of the said notice to be intimated by the consumer in writing whichever is earlier. |

(hereafter called the contract demand) subject to provisions of clause 13 hereof)

SAVE AS herein before modified the said agreement shall remain and have full force and effect.

IN WITNESSES WHEREOF the parties hereto have signed this agreement on the dates and year mentioned against their respective signatures.

WITNESSES:-

1. (Name and full address)

Superintending Engineer (O&M)  
MPPKVV Co. Ltd. DEWAS

2. (Name and full address)

For and on behalf of the  
M.P.P.K.V.V. Co. Ltd.

For Ipca Laboratories Ltd.

1. (Name and full address)

Shailendra Pathak  
278 Bawrang Nagar  
Indore

A. K. JAIN  
Joint Managing Director  
CONSUMER  
(Name designation & full address)

2. (Name and full address)

Vitram Shekha  
27 Vikas Nagar

The Common Seal was hereinto  
Affixed in presence of :

1. (Name and full address)

Shailendra Pathak  
278 Bawrang Nagar  
Indore Indore

2. (Name and full address)

Vitram Shekha  
27 Vikas Nagar

Common Seal of consumer



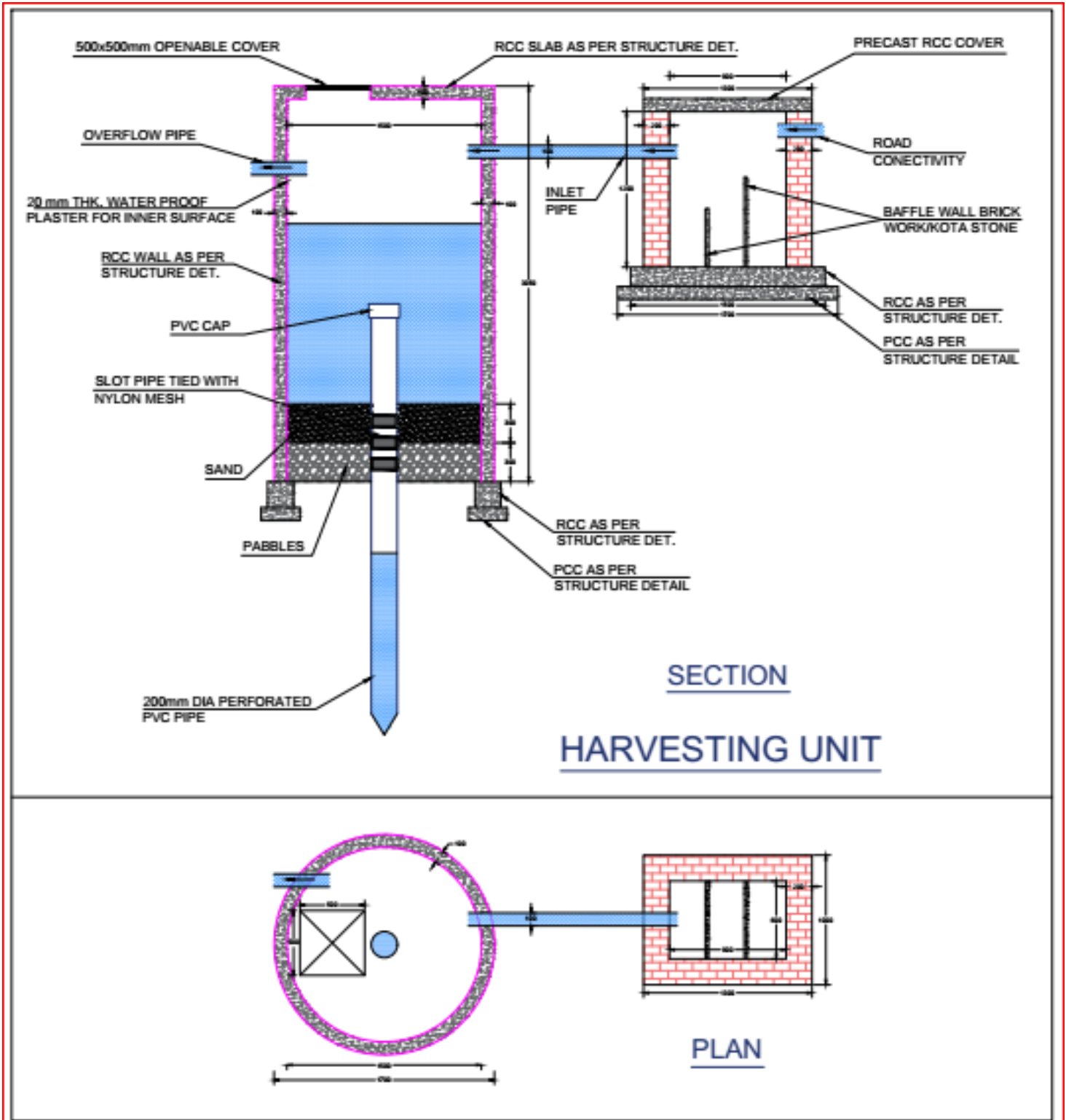
Annexure-5

RWH Photograph



## ANNEXURE-6

### RWH Design



# **ANNEXURE-7**

## **Fire NOC**

Office Of Commissioner/Fire Officer, DEWAS NAGAR NIGAM  
UJJAIN Division , DEWAS  
Madhya Pradesh

अग्नि शमन प्रकोष्ठ  
Fire Cell

अनापत्ति प्रमाण पत्र  
No Objection Certificate

जावक क्रमांक / Dispatch Number : 6100003322/FNOC/COL/2022/1727  
आवेदन की तिथि / Application Date : Dec 2, 2021 जावक की तिथि / Dispatch Date : 10-Jan-22  
आवेदक का नाम / Applicant Name : IPCA LABORATORIES LTD IPCA LABORATORIES LTD

आवेदक का पता / Applicant Address : PLOT NO. 19 B, 20 B, 21 B, 20 A, 19 A, 21 A 22, INDUSTRIAL AREA  
NO. 1, DEWAS, DISTT. DEWAS DEWAS 455001

अनापत्ति प्रमाण पत्र का प्रकार / Type of NOC : TEMPORARY

अधिभोग का प्रकार / Type of Occupancy : Industrial Building/ औद्योगिक भवन

ईमारत का ऊंचाई / Building Height : 22 ( मीटर में / Meter )

भूमि / भवन का क्षेत्रफल / Plot / Building Area: 102911 ( Sq.Mtr )

संपत्ति का पता / Property Address : PLOT NO. 19 B, 20 B, 21 B, 20 22, INDUSTRIAL AREA NO. 1, DEW  
DEWAS NAGAR NIGAM

अग्नि प्राधिकारी द्वारा अनुमोदित / Approved by Fire Authority :

विषय/Subject-

टिप्पणि / Remarks-

Office Of Commissioner/Fire Officer, DEWAS NAGAR NIGAM  
UJJAIN Division , DEWAS  
Madhya Pradesh

अग्नि शमन प्रकोष्ठ

Fire Cell

अनापत्ति प्रमाण पत्र

No Objection Certificate

जावक क्रमांक / Dispatch Number . : 6100003322/FNOC/COL/2022/1727

आवेदन की तिथि / Application Date : Dec 2, 2021 जावक की तिथि / Dispatch Date : 10-Jan-22

आवेदक का नाम / Applicant Name : IPCA LABORATORIES LTD IPCA LABORATORIES LTD

Office Of Commissioner/Fire Officer, DEWAS NAGAR NIGAM  
UJJAIN Division , DEWAS  
Madhya Pradesh

अग्नि शमन प्रकोष्ठ  
Fire Cell

अनापत्ति प्रमाण पत्र  
No Objection Certificate

जावक क्रमांक / Dispatch Number . : 6100003322/FNOC/COL/2022/1727  
आवेदन की तिथि / Application Date : Dec 2, 2021 जावक की तिथि / Dispatch Date : 10-Jan-22  
आवेदक का नाम / Applicant Name : IPCA LABORATORIES LTD IPCA LABORATORIES LTD



Office Of Commissioner/Fire Officer, DEWAS NAGAR NIGAM  
UJJAIN Division , DEWAS  
Madhya Pradesh

अग्नि शमन प्रकोष्ठ  
Fire Cell

अनापत्ति प्रमाण पत्र  
No Objection Certificate

जावक क्रमांक / Dispatch Number : 6100003322/FNOC/COL/2022/1727

आवेदन की तिथि / Application Date : Dec 2, 2021 जावक की तिथि / Dispatch Date : 10-Jan-22

आवेदक का नाम / Applicant Name : IPCA LABORATORIES LTD IPCA LABORATORIES LTD

**Vishal  
Singh  
Chouhan**

Digitally signed by Vishal Singh Chouhan  
DN: c=IN, o=Personal, title=7042,  
pseudonym=aa5146fb6b28f278403ada34eaa  
05e719085502a,  
2.5.4.20=28a32ab4e76d724f2aaaaec745914  
81620594f902df9da7164eb9bc15c5fd6cc,  
postalCode=454001, st=Madhya Pradesh,  
serialNumber=039f324ebd5211b84e99deac7  
56ad01d49afa7a9e8011fc04e9d28199a8da1  
51, cn=Vishal Singh Chouhan  
Date: 2022.01.10 11:39:58 +05'30'

Commissioner/Fire Officer, DEWAS NAGAR NIGAM

UJJAIN Division , DEWAS  
Madhya Pradesh

**Annexure-8**  
**CER Compliance Status Report**

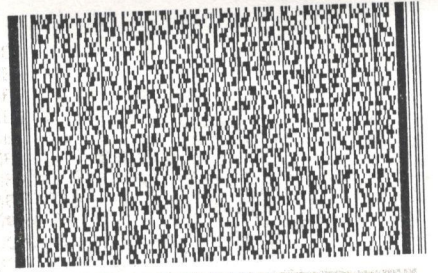
<b>Sr. No.</b>	<b>Finiancial Year</b>	<b>Year wise fund allotted(Crores)</b>	<b>Ammount Spend</b>	<b>CER Activity</b>
1	2020-21	1.43	1.43crores	As directed by District Collector, we spent Rs.143 Lacs In the year 2020-21 as CER for development of Sports Park at AB Road Dewas. Annexure22 attached for CER activity details.
2	2021-22	1.30	130 Lacs	Another investment of Rs 1.30 Cr is going on for sports garden development from Tata square to Amona .
Total		2.73		

# **ANNEXURE-9**

## **TSDf Agreement**



Registration and Stamp Department  
Madhya Pradesh



Certificate of Stamp Duty

E-Stamp Details

E-Stamp Code 01011002112022000066  
Total E-Stamp Amount 500  
Govt. Stamp Duty (Rs.) 500 Municipality Duty (Rs.) 0  
Janpad Duty (Rs.) 0 - Upkar Amount (Rs.) 0  
Exempted Amount(Rs.) 0  
E-Stamp Type NON-JUDICIAL  
Issue Date & Time 02/11/2022 00:57:37  
Service Provider or Issuer Details Preeti Mahajan/SP011743009201500005  
SP/SRO/DRO/HO Details 147, Greater Vaishali Nagar, Indore INDORE INDORE

Deed Details

Deed Type Bond  
Deed Instrument Bond, not being a debenture and not being otherwise provided for by this Act or by the Court Fee Act, 1870 (7 of 1870). (a) 0.5 percent of the amount or value secured subject to a minimum of five hundred rupees. (b) Where no valuation is possible, five hundred rupees.  
Purpose BOND

First Party Details

Organization Name IPCA LABORATORIES LIMITED  
Address PLOT NO.16 TO 22,INDUSTRIAL AREA NO.1, A B ROAD, DEWAS Madhya Pradesh  
INDIA  
Number of Persons 1

Second Party Details

Organization Name NA  
Address NA INDORE Madhya Pradesh INDIA  
Number of Persons 0

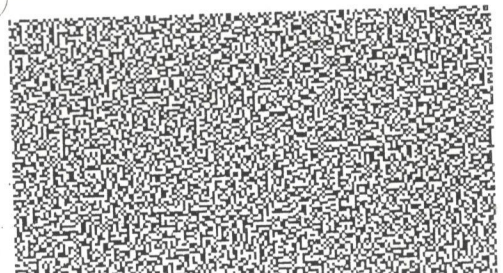
BOND

THIS AGREEMENT is made at Dewas on this 29<sup>th</sup> day of **June 2022**, BY AND BETWEEN **Ipca laboratories Ltd** (Plot No 16-22 industrial area no.1 A.E Road Dewas - 455001) having its registered office at Mumbai represented by its Unit Head , (hereinafter referred as "Generator / User" which expression shall unless repugnant to the subject or context include its administrators, successors and assigns) as Party No.1

AND

**M/s. PITHAMPUR INDUSTRIAL WASTE MANAGEMENT PRIVATE LIMITED**, Company registered under the Companies Act, 1956 and having its registered office at Level 11B, Aurobindo Galaxy, Hyderabad knowledge City, Hitech City Road, Hyderabad - 500031 represented by its **Project Head - PIWMPL**, (hereinafter referred as "PIWMPL/ Operator" which expression shall unless repugnant to the subject or context include its administrators, successors and assigns) as Party No 2

Digitally signed by PRITI  
MAHAJAN  
Date: 2022.11.02 00:57:55  
IST





WHEREAS PIWMPL is engaged in the business of Waste Management and presently operating 'Integrated Common Hazardous Waste Treatment Storage Disposal Facility' at various engineered waste management units under its control at various locations in India, as per the guidelines under Hazardous Rules and as per the authorization of SPCB.

WHEREAS the Generator being desirous of availing the services of collection, transport, treatment, storage and disposal of Hazardous Waste generated at their premises approached PIWMPL and the same has been accepted by PIWMPL on the terms and conditions set out in this agreement read with the provisions of Hazardous Rules and supervision of SPCB.

NOW THEREFORE in consideration of the above-mentioned premises and the mutual promises contained herein, the Generator and PIWMPL have agreed to enter into this agreement under the terms and conditions set forth hereinafter.

**NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:**

**1. DEFINITIONS AND INTERPRETATION**

1.1 **Definitions:** In this Agreement, including in the recitals hereof, the following words, expressions and abbreviations shall have the following meanings, unless the context otherwise requires:

"Agreement" means this agreement including all attachments, annexures or Schedules annexed thereto.

"CPCB" means Central Pollution Control Board.

"Hazardous Rules" means Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.

"MoEF" means Ministry of Environment & Forests.

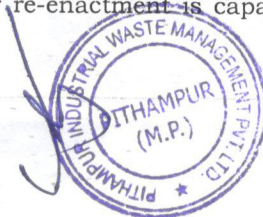
"SPSB" means Madhya Pradesh Pollution Control Board in the state in which the TSDF operated by PIWMPL is situated.

"TSDF" means the Integrated Common Hazardous Waste Treatment Storage Disposal Facility by name "PITHAMPUR INDUSTRIAL WASTE MANAGEMENT PRIVATE LIMITED" (PIWMPL) operated by PIWMPL and located at Plot No-104, Sector-2, Industrial Area, Pithampur, Dhar district, MP, pursuant to the Consent for Establishment No. 16410/TS/Z-1/MPPCB/2005 dated 5<sup>th</sup> September 2005 under Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974, under Section 21 of Air (Prevention and Control of Pollution) Act, 1981 and Authorization no.1035 (54), dated 27<sup>th</sup> September 2014 & 319 (96) dated 16<sup>th</sup> April 2015 under the Provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

"Waste" means Hazardous waste generated in the premises of the Generator.

1.2 **Interpretation:** In this Agreement, unless the subject or context otherwise requires:

- A. Reference to the singular number shall include references to the plural number and vice-versa;
- B. References to a "person" shall include references to natural persons, partnership firms, companies, bodies corporate and associations, whether incorporated or not or any other organization or entity including any governmental or political sub-division, ministry, department or agency thereof;
- C. References to recitals, clauses and schedules / annexures are to recitals, clauses and schedules to this Agreement;
- D. Any reference herein to a statutory provision shall include such provision, as is in force for the time being and as from time to time, amended or re-enacted in so far as such amendment or re-enactment is capable of applying to any transactions covered by this Agreement.





E. Clause headings used herein are only for ease of reference and shall not affect the interpretation of this Agreement.

1.3 The Schedules / Annexures shall form an integral part of this Agreement.

1.4 All capitalized terms used in this agreement which have not been specifically defined in this Agreement shall, unless inconsistent with the context have the meanings assigned to them under the Authorization Agreement.

## 2 SCOPE OF SERVICES

2.1 The scope of services to be provided by PIWMPL under this agreement shall be collection, transportation, treatment, storage and disposal of Waste generated at the premises of the Generator located at Dewas.

2.2 It is agreed between the Parties that PIWMPL shall provide the above services to the Generator through Pithampur Industrial Waste Management Private Limited (PIWMPL), a TSDF operated by PIWMPL

2.3 PIWMPL shall dispose the Waste as per the mandate of the SPCB read with the provisions of Hazardous Rules.

2.4 PIWMPL also agrees to accept even non-hazardous wastes from the Generator provided that the concerned SPCB issues 'no objection'.

## 3 GENERAL CONDITIONS

3.1 The Generator shall immediately upon execution of this agreement, become registered member of PIWMPL by paying a membership fee as per the criteria mentioned under **Annexure item no. 1**. The lifetime membership / security deposit shall be adjustable against user charges in the event either party decides to terminate this agreement. No financial charges are applicable on such membership / security deposit.

3.2 The Generator shall provide to PIWMPL, a sample of the Waste and inform the entire process details which leads to generation of such Waste, for the purpose of determining the Waste characteristics and to decide parameters for comprehensive analysis, as well as its final pathway of treatment, storage and disposal of the Waste.

3.3 PIWMPL shall carry on the comprehensive analysis of the Waste in its laboratory at the cost of the Generator, as per the parameters identified at **Annexure item no. 08**. The comprehensive analysis report shall be used by PIWMPL to determine the disposal pathway based on the waste characteristics & as per MoEF, CPCB and the SPCB rules and guidelines issued from time to time. The disposal pathway shall be mutually agreed between the Generator & PIWMPL and shall form basis for disposal/ user charges.

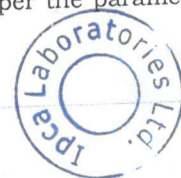
3.4 Upon receipt of information from the Generator, PIWMPL shall plan and schedule for collection of the Waste from the Generator and the safety during transportation is the collective responsibility of the Generator and the transporter.

3.5 The Generator shall provide the details of Waste to PIWMPL as mentioned below:

i) Complete details of the Waste and its characteristics regarding presence of explosive / ignitable / corrosive / toxic / odorous compounds in the manifest provided to the transporter for safe transportation and disposal.

ii) Safety information as MSDS/ SOP for handling & storage and marking of hazardous waste container in 'Form 08', 'waste transportation manifest' in Form no.10 and 'Term Card' in Form no. 09 for every Waste type as per Hazardous Rules.

3.6 PIWMPL shall analyze the Waste received through finger print analysis as per the parameters identified at **Annexure item no. 09** as prescribed by the concerned SPCB.



- 3.7 In the event there are any differences in the analysis results of comprehensive analysis and finger print analysis, the Generator may either accept the results of PIWMPL or send their samples to a mutually agreed third party analysis at their own cost. Any discrepancy in relation thereto shall be informed to the SPCB.
- 3.8 The Generator shall provide a fresh comprehensive analysis report when there is a Change in the waste characteristics, manufacturing processes, changes in product Mix etc. or 2 Years whichever is earlier.
- 3.9 In the event of any false information or withholding information, all the liabilities, whether directly or indirectly arising there from, during transportation, handling, treatment & disposal shall be the responsibility of the Generator.
- 3.10 The Generator shall provide an advance declaration every year in the month of April assuring quantity of Waste they would be sending to PIWMPL till next March 31, and declare Waste quantities on annual / monthly basis as per Hazardous Rules as per the declaration format provided in Annexure.
- 3.11 PIWMPL agrees to provide its containers available at its TSDF to the Generator provided the Generator pays the container maintenance charges to PIWMPL as per **Annexure item no. 06**.
- 3.12 The Waste supplied by the Generator shall not contain any kind of nuclear / radioactive or any other prohibited material.
- 3.13 PIWMPL shall also supply specially designed containers to help segregate the Waste and arrange the transportation of such containers from the Generator premises.
- 3.14 The Generator shall pay a fixed amount to PIWMPL as minimum monthly service commitment charges every month for the purpose of utilization of PIWMPL services. This amount shall be adjusted against every month user Charges or in calendar period of one year. In the event, for whatsoever reason, the Generator is unable to utilize the facility services for a particular month / period, the Generator shall forfeit the amount that is unutilized in that calendar year. The charges are mentioned in **Annexure Item No. 07**

#### 4 **USER CHARGES & TERMS OF PAYMENT:**

- 4.1 The Generator shall pay monthly user charges to PIWMPL for its services as per the slab mentioned in **Annexure item no. 2 & 3**, which is based upon the declaration given by the Generator as per Annexure. In addition the Generator shall also be liable for payment of applicable taxes, levies etc., if any, on the user charges **Annexure item no. 02 (a, b & c)** and transportation charges **Annexure item no. 03 (a&b)**
- 4.2 The user charges are subject to annual revision on the basis of government of India wholesale price index and also in every event of escalation of fuel costs, power tariff, change in disposal technologies / method, wage hike etc. However User Charges & Transportation Charges are subject to minimum Annual Revision of 3.33%.
- 4.3 PIWMPL shall send the monthly user charges invoice to the Generator on or before 5<sup>th</sup> of every succeeding month and the bill amount shall be payable by the Generator on or before 5<sup>th</sup> of the subsequent month.
- 4.4 In case of delayed payments the Generator shall be liable to pay interest at the rate of two percent (2%) per month on the outstanding amount during the default period. In the event of any bill amount along with interest is due for more than three months, PIWMPL reserves the right to refuse to extend its services to the Generator and even to terminate this agreement with immediate effect.

#### 5 **TERM OF AGREEMENT**





This Agreement shall be valid for a period of 5 years (validity of hazardous waste authorization) effective from date of agreement, subject to earlier termination by either party in accordance with this agreement.

## 6 FORCE MAJEURE

Notwithstanding anything else contained herein, neither Party hereto shall be liable for damages or to have this agreement terminated for any delay or default in the performance of such Party hereunder if such delay or default in performance derives from conditions beyond the reasonable control of such Party, including but not limited to, acts of god, strikes, fires, floods, extreme drought, shortage of supply, riots, work stoppages, embargoes, governmental actions or damage to the plant or facility or any cause unavoidable or beyond the control of either party including any arbitrary ruling by the Government prohibiting the handling of the Waste or continuing domestic or international problems such as wars or insurrections.

## 7 INDEMNITY

The Generator do hereby indemnify, keep indemnified and hold harmless the PIWMPL, its representatives, nominees and officers (including without limitation, reimbursement of any loss suffered by PIWMPL and / or its officers, directors, employees, agents or affiliates and their legal costs), awards, damages, losses and / or expenses, either pecuniary or non-pecuniary in nature, arising directly or indirectly, whether during collection or transportation or treatment or storage or disposal, as a result of:

- a) the Waste supplied by or collected from the Generator in case of any mismatch of waste from Trem Card or finger prints; and any non-disclosure or wrong disclosure of any information as to the characteristic of waste, or
- b) any civil or criminal proceedings or liability under any law for any unlawful dumping of untreated wastes by the Generator either at the project site of PIWMPL or anywhere else
- c) any violation or non-compliance by the Generator of the provisions of Hazardous Waste (M H & TBM) Rules 2016, Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 including any modifications, amendments made thereto and any new acts and rules legislated and promulgated governing the activity under this Agreement during the term of this Agreement or any extension thereof.

## 8 EVENTS OF DEFAULT

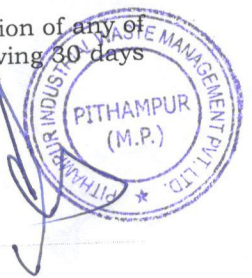
The following shall constitute Generator's events of default:

- a. If the Generator fails / refuses to pay its bills / dues for the user charges payable under this Agreement.
- b. If the Generator fails / refuses to pay within the time stipulated the advance amounts and deposits etc. called upon to do so by PIWMPL.
- c. If the Waste supplied by the Generator contains any radioactive or prohibited material.
- d. If the Generator commits gross violation of the terms of this agreement.

## 9 TERMINATION

- 9.1 The Operator shall have the right to terminate this Agreement without giving any notice, immediately upon occurrence of the Generator's event of default.
- 9.2 Either party shall have the right to terminate this Agreement in the event of violation of any of the terms and conditions as agreed upon in this agreement or otherwise, upon giving 30 days written notice to the other party.

## 10 ENTIRE AGREEMENT



This Agreement shall be deemed to represent the entire Agreement between the parties hereto regarding the subject matter hereof and shall supersede, cancel and replace any and all prior agreements or arrangements, if any, in this behalf, by and between the parties hereto.

## 11 RELATIONSHIP OF THE PARTIES

Nothing contained herein shall be deemed to constitute a partnership, joint venture or agency by and between the parties hereto.

## 12 VARIATIONS

This Agreement may be modified or amended only by writing, duly executed by or on behalf of the parties hereto.

## 13 INVALIDITY

In the event that any provisions of this Agreement is held to be illegal, invalid or unenforceable under any present or future laws of the Republic of India such provisions shall be deemed terminable and the remaining parts & provisions of this Agreement shall remain in full force & effect.

## 14 NOTICES

14.1 Any notice, request, demand or other communication given or made under or in connection with the matters contemplated by this Agreement shall be in writing and shall be delivered personally or sent by registered post acknowledgement due or by facsimile or by courier:

In case of GENERATOR to:

**Attn:**

In case of PIWMPL to:

**Attn: Factory Head – PIWMPL**

And shall be deemed to have been duly given or made as follows:-

- (a) if personally delivered, upon delivery at the address of the relevant Party;
- (b) if sent by registered post-acknowledgement due seven (7) days after the posting;
- (c) if sent by facsimile upon receipt of confirmation by sender, from the receiver, that the facsimile has been received;
- (d) if sent by courier four (4) days after the date of dispatch.

14.2 A Party may notify the other Party of a change to its name, relevant addressee or address, number for the purposes of Cause 14.1 as provided herein.

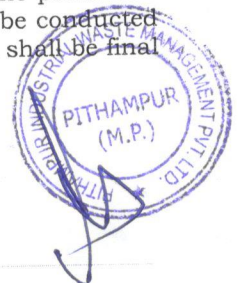
## 15 SURVIVAL

Notwithstanding any contained in this Agreement, the provisions of clause 4, 7 and 8 of this Agreement shall survive for 5 years after termination or completion of term of this agreement whichever is later.

## 16 DISPUTE RESOLUTION

Any dispute arising out of this agreement and the contents of the Annexure, hereto between the Generator and PIWMPL shall be referred to Arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The arbitration proceedings shall be conducted in English and the Arbitration shall take place at Hyderabad. The arbitral award shall be final and binding upon both the parties.

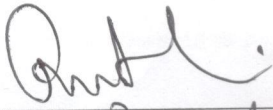
## 17 APPLICABLE LAW





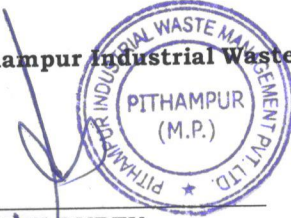
PIWMPL and the Generator mutually agree that the courts of law at Hyderabad shall have jurisdiction over all the disputes arising out of this Agreement.

For **IPCA Laboratories Ltd**



Name: Pawan Kothari  
Designation: vice President  
(Commercial)

For **Pithampur Industrial Waste Management Pvt Ltd**



Name: AMIT DUBEY  
Designation: Factory Head

In the Presence of

C. S. Hillari

Name: C. S. Hillari  
Designation: Sr. G.M. Operations

Name: Tarun Barot  
Designation: DGM.

In the Presence of

Siddhant Dixit  
Name: Siddhant Dixit  
Designation: Asst. Manager

Rohit Adhar  
Name: Rohit Adhar  
Designation: Asst Manager



## ANNEXURE

### Common Hazardous Waste Treatment Storage & Disposal Facility

#### **1) MEMBERSHIP DEPOSIT/ SECURITY DEPOSIT:**

The Membership deposit payable by the generator shall be determined as per the below matrix:

Capital Investment of Industry [Rs.] ( On Gross Block, without depreciation)	Fees [Rs.]
< 1 Crore	20,000
1- 5 Crore	50,000
5 - 10 Crore	1,00,000
10 - 50 Crore	2,50,000
50 - 100 Crore	5,00,000
100 - 200 Crore	7,50,000
> 200 Crore	10,00,000

Note: This deposit is adjustable against waste supply in the event, members desire to withdraw membership or as per Clause in Agreement. This methodology and matrix has been arrived after discussions and finalization with the Project promoter viz., Pithampur Auto Cluster Ltd., to facilitate industries participation and contribution in development of a Common TSDF in MP.

#### **2) USER CHARGES:**

The GENERATOR shall pay the following applicable User Charges based on the Waste Types. (As per assessment year 2022-23)

##### **a) Direct Landfill Charges: Per MT**

Direct Disposal into Landfill: Rs.2804

##### **b) Stabilization Charges: Per MT**

Cost of Direct Land Filling (1+ Bulking Factor) + Cost of Stabilization Reagents + Rs.200.00 per MT for re-handling expenses.

##### **c) Incineration Charges: per MT or KL (also depends on Material Density)**

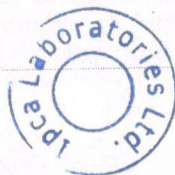
Rs. 21281/- (Base Cost) + Cost of Chemicals, Additives + Cost of Fuel + Cost of Power + Cost of Pollutant Scrubbing + Cost of throughput time + residual landfill

For stored quantities, necessary advance payments by Demand Draft shall be taken after mutual discussions.

#### **3) TRANSPORTATION CHARGES:** [Optional, applicable when PIWMPL – TSDF Services are utilized]

##### **a) Waste Transport Charges (Rate quoted for per 10 MT minimum)**

Up to 50 Kms – Rs. 4463.00  
50-100 Kms – Rs. 9594.00  
100-200 Kms – Rs. 13758.00





Distance calculated both-ways (To & Fro)

**b) Truck Detention Charges:**

Maximum time of Three hours is allowed for the truck to be detained at the Generator premises from the time of reporting at their Security Gate. In the event this period is exceeded then Rs. 500/- per hour shall be charged as detention charges unless it is mutually agreed and accepted between both parties in writing.

**c) Minimum Truck Load Capacity:**

Minimum 90% of Container Capacity or Truck Load Capacity shall be charged for Transportation.

**4) Project Development and Management Charges- [PDMC] -**

A charge @ 5% on the User Charges shall be applicable and levied on the actual waste quantities and applicable user charges. This Charge is shared with the Project Promoter, viz., Pithampur Auto Cluster Ltd. towards various project development initiatives, administration, sustenance and management of TSDF.

**5) ESCROW amount @5% of disposal cost :-**

A charge @ 5% on disposal charges (On Landfillable waste disposal) shall be applicable and levied on the actual waste quantities. Considering the precautionary principle and polluter pays principle approach, It is recommended that 5% of the annual turnover of the Landfillable waste should be deposited by the operators of the facility towards the escrow account.

**6) CONTAINER MAINTENANCE CHARGES:** [Optional, applicable when containerized truck Services are utilized]

The Generator has to pay the following charges as mentioned below towards the services of the Container, if opted for by the Generator.

**a) Container Maintenance Charge: The charges are: -**

- |                        |   |
|------------------------|---|
| • 5.0 MT Hook loaders  | Rs. 3,24,411/- per Container<br>(Excluding GST) |
| • 10.0 MT Hook Loaders | Rs. 5,60,346/- per Container<br>(Excluding GST) |
| • 15.0 MT Hook Loaders | Rs. 6,78,314/- per Container<br>(Excluding GST) |

Note: Since these containers will be replaced after three years, above container maintenance charges will be valid for **three** years only. The CMC Charges based on procurement of material and other charges including fabrication cost of containers as per FY 2022-23.

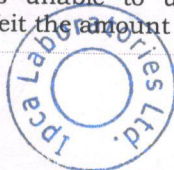
**b) Container Handling Charges:**

The GENERATOR shall pay for Container Handling Charges to PIWMPL as follows for utilizing the Material Handling Equipment.

For Hook lift/Crane/Dumper/Tipper Operations:	Rs.100/- per MT.
For Waste transported by Generator, Handling (Unloading) Charges shall be	Rs.100/- per MT.

**7) MINIMUM MONTHLY SERVICE CHARGES:**

The GENERATOR has to pay as applicable minimum monthly service charges per month. This amount shall be paid on a minimum half yearly basis, in advance. This amount shall be adjusted against every month User Charges invoices or in calendar period of one year. In the event, for whatsoever reason, the GENERATOR is unable to utilize the facility services for a particular month/period, the GENERATOR shall forfeit the amount that is unutilized in that calendar year.





- for SSI – Rs. 500/- per month
- for MSI – Rs. 1000/- per month
- for LSI – Rs. 2,000/- per month

### 8) PARAMETERS TO BE ANALYZED FOR COMPREHENSIVE ANALYSIS OF WASTE:

- Physical State: (Liquid/ Slurry/ Sludge/ Semi-solid/Solid: Inorganic, Organic, Metallic)
- Different Phases: (in cases of Solid / Slurries / Sludge) contained in aqueous liquids/solutions
- Colour and Texture
- Specific Gravity
- Viscosity
- Calorific Value
- Flash Point
- % Moisture content ( Loss on ignition at 105oC)
- % Organic Content (Loss on ignition at 550oC)
- Paint Filter Liquid Test (PFLT)
- PH
- Sulphur (elemental)
- 24 hour Leaching Procedure
- Reactive Cyanide (PPM)
- Total Cyanide
- Reactive Sulphide (ppm)
- Sulphur elemental
- Concentration of individual inorganics (Metals), both total and leachable, specific parameters to be determined based on source of waste
- Oil and Grease
- Extractable Organics-
- % Carbon, % Nitrogen, % Sulphur, % Hydrogen
- Concentration of Individual Organics
- TCLP for identified parameters
- Analysis charges minimum Rs15,000/- per sample excluding GST.** The analysis charges are subject to annual revision on the basis of wages, Chemical cost, Equipment maintenance and other charges as per FY 2020-21.

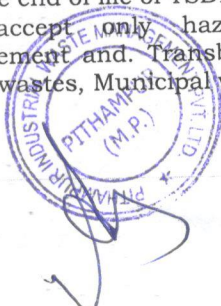
### 9) PARAMETERS TO BE ANALYZED FOR FINGER PRINT ANALYSIS:

- Physical State of the WASTE
- Identification of different phases of WASTE
- Colour and Texture
- Specific Gravity
- Viscosity
- Flash Point
- % Moisture content ( Loss on ignition at 105°C)
- % Organic Content (Loss on ignition at 550°C)
- Paint Filter Liquid Test (PFLT)
- Liquid Release test
- pH
- Reactive Cyanide (PPM)
- Reactive Sulphide (ppm)

**10) TAXES / LEVIES:-** All Government / Municipal / Panchayat Taxes / Duties/ Levies/ Octroi / Tolls etc, as applicable from time to time, shall be payable by the Generator.

#### ❖ Terms & Conditions:

- This membership is valid as long as the Generator is in good standing with the TSDF and has continued valid authorization from SPCB.
- The membership deposit is one time refundable deposit with benefits for full tenure of TSDF. The deposit will be refunded against waste disposable charges, when desired to discontinue membership, before the end of life of TSDF, otherwise it lapses.
- This TSDF shall accept only hazardous wastes as classified in Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for disposal and shall not accept radioactive wastes, Municipal wastes, Bio-Medical waste.



*[Handwritten signature]*

- Acceptance of wastes is dependent on the fulfillment of regulatory and statutory guidelines for operations of TSDF issued from time to time.
- Pathway of disposal of wastes and its price shall be decided based on the guidelines issued from time to time by regulatory authorities and shall be at the discretion of TSDF.

**DECLARATION**

We Ipca Laboratories Ltd Dewas, hereby declare that based on our industry production and our annual projections we shall be disposing the following Hazardous Waste types to PIWMPL. (Add sheets could be used for multiple waste types)

- The Avg. Yearly generation of Hazardous Waste is expected as follows.

1. Avg. 1200 MT per year of ATFD Salt type of Hazardous WASTE
2. Avg. 300 MT MT per year of ETP Sludge type of Hazardous WASTE
3. Avg. 18 MT per year of Process residue type of Hazardous WASTE

- Avg. monthly generation of Hazardous Waste is expected as follows.

1. Avg. 100 MT per Month of ATFD Salt type of Hazardous WASTE
2. Avg. 25 MT MT per Month of ETP Sludge type of Hazardous WASTE
3. Avg. 1.5 MT per Month of Process residue type of Hazardous WASTE

- The Total accumulated/stored/buried in pits Hazardous Waste is approximately as follows:

1. Avg. \_\_\_\_\_ MT per year of \_\_\_\_\_ type of Hazardous WASTE
2. Avg. \_\_\_\_\_ MT per year of \_\_\_\_\_ type of Hazardous WASTE
3. Avg. \_\_\_\_\_ MT per year of \_\_\_\_\_ type of Hazardous WASTE

FOR

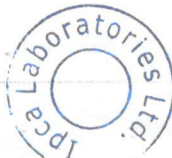
*[Handwritten Signature]*

11/7/22 / (Pawan Kothari)

**Authorized Signatory**  
**The Generator, the First Part. vice forident. Comm.**

Witness: Name: Tanvika Buroi Sign: *[Signature]*  
 Company/Occupation: Ipca Laboratories Ltd  
 Designation: DGM

Witness: Name: C.S. Hillal Sign: *[Signature]*  
 Company/Occupation: Gr. Chem. operations  
 Designation: \_\_\_\_\_





**ANNEXURE-10**

**APCD-Bag Filter**



## Annexure -11

### Boiler Stack





## Annexure -12

### DG Stack



# **Annexure-13**

## **Stack Monitoring** **Report**





Format No. : AL/FM/51D

## Test Report

**Report Issued to**

IPCA LABORATORIES LIMITED DEWAS  
 Plot No. 16 to 22, industrial area No.1  
 A.B. Road  
 Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2210/2022 - 2023  
 Booking Date : 11/10/2022  
 TRF Ref. No. : NA  
 TRF Date : NA  
 MFG. LIC. NO. : NA  
 Issue Date : 17/10/2022

<b>Sample Name</b> : Stack Air Monitoring	<b>Stack Attached To</b> : Boiler (6 TPH)	<b>Flue gas Velocity</b> : 6.60 m/sec
<b>Sampling Date&amp;Time</b> : 10/10/2022 12:30	<b>Location</b> : Boiler (6 TPH)	<b>Flue gas Temperature</b> : 120°C
<b>Sampling Duration</b> : 60 Min	<b>Ambient Temp.</b> : 29°C	<b>Diameter</b> : NA
<b>Sampling By</b> : Azis Labs	<b>Humidity</b> : 68%	<b>Analysis Start Date</b> : 12/10/2022
<b>Wind Direction</b> : From South West	<b>Fuel</b> : Coal	<b>Analysis End Date</b> : 17/10/2022
<b>Stack Height</b> : 30 meter		

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter(PM)	mg/Nm3	46.86	Max 150	IS : 11255 (Part-1) 1985 RA 2003
2.	Oxides of Sulphur (SOx)	mg/Nm3	31.77	Max 600	IS : 11255 (Part-2) 1985
3.	Oxides of Nitrogen (NOx)	mg/Nm3	58.93	Max 300	IS : 11255 (Part7) 2005 RA 2003
4.	Carbon monoxide(CO)	mg/Nm3	44.65	---	IS : 13270 (1992)

**Remarks :**

**Note :**

1. The legal liabilities limited up to the analytical charges only.
2. The results are related only to the sample tested.
3. This reports shall not be reproduced without the written approval of Azis Labs.
4. Specification as per MoEF & CC/CPCB/MPPCB.
5. MOEF Recognized environment Laboratory valid up to 28/02/2023(Q. 15018/02/2019)
6. NABL Accredited Lab (ISO /IEC 17025 :2017) Valid until 05/06/2023

  
 Authorized Signatory





# AzisLabs

- ▶ Works : Plot No. M-43, Sector-3, Pithampur 454774, Dist. Dhar, (M.P.) India
- ▶ City Office : 3/26, Vijay Nagar, Opp. Sayaji Hotel, Indore (M.P.) India, Tel. No.: 0731-4068173
- ▶ Lab Contact No. : 96698 89316, 98270 08819, 7089333892
- ▶ Email : info@azislabs.com, j.dingwani@azislabs.com, Visit : www.azislabs.in

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ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S) CERTIFIED LAB

Format No. : AL/FM/51D

## Test Report

### Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2211/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Stack Air Monitoring

Sampling Date&Time : 10/10/2022 13:40	Stack Attached To: DG (1000 KVA)	Flue gas Velocity : 7.99 m/sec
Sampling Duration : 20 Min	Location : DG (1000 KVA)	Flue gas Temperature : 68°C
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : 30 meter	Fuel : HSD	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter(PM)	mg/Nm <sup>3</sup>	39.42	Max 75	IS : 11255 (Part-1) 1985
2.	Oxides of Sulphur (SO <sub>x</sub> )	mg/Nm <sup>3</sup>	24.51	----	IS : 11255 (Part-2) 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	51.81	Max 1100	IS : 11255 (Part-7) 2005
4.	Carbon Monoxide(CO)	mg/Nm <sup>3</sup>	60.35	Max 150	IS : 13270-1992
5.	Non methane hydro carbon(NMHC)	mg/Nm <sup>3</sup>	24.85	Max 150	----

### Remarks :

#### Note :

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6. NABL Accredited Lab (ISO /IEC 17025 :2017) Valid until 05/06/2023

  
Authorized Signatory

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- ▶ \* Food & Agriculture Products Testing, \*Method Development & Validation (Pharma, Food & Environment).
- ▶ \*API Product (Process Development & Research), GMP/GLP Solution for Pharma / Food Industry





# Azis Labs

- ▶ **Works :** Plot No. M-43, Sector-3, Pithampur 454774, Dist. Dhar, (M.P.) India
- ▶ **City Office :** 3/26, Vijay Nagar, Opp. Sayaji Hotel, Indore (M.P.) India, **Tel. No.:** 0731-4068173
- ▶ **Lab Contact No. :** 96698 89316, 98270 08819, 7089333892
- ▶ **Email :** info@azislabs.com, j.dingwani@azislabs.com, **Visit :** www.azislabs.in

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ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S) CERTIFIED LAB

## Test Report

Format No. : AL/FM/51D

**Report Issued to**

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2212/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Stack Air

Sampling Date&Time : 10/10/2022 14:10	Stack Attached To: Scrubber I-SEBR-02 HCL Solution	Flue gas Velocity : 6.83 m/sec
Sampling Duration : 15 Min	Location : Scrubber I-SEBR-02 HCL Solution	Flue gas Temperature : 48°C
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Total Particulate matter(TPM)	mg/nm3	7.84	NA	Inhouse method
2.	TVOC	ppm	1.64	NA	Inhouse method
3.	Scrubber gas	µg/nm3	20.19	NA	Inhouse method

**Remarks :**

**Note :**

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4. Specification as per MoEF&CC/CPCB/MPPCB.
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5. MOEF Recognized environment Laboratory valid up to 28/02/2023(Q. 15018/02/2019)

Authorized Signatory

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- ▶ \*Food & Agriculture Products Testing, \*Method Development & Validation (Pharma, Food & Environment).
- ▶ \*API Product (Process Development & Research), GMP/GLP Solution for Pharma/ Food Industry

# **Annexure-14**

## **Ambient Air**

# **Monitoring Report**





# Azis Labs

- ▶ Works : Plot No. M-43, Sector-3, Pithampur 454774, Dist. Dhar, (M.P.) India
- ▶ City Office : 3/26, Vijay Nagar, Opp. Sayaji Hotel, Indore (M.P.) India, Tel. No.: 0731-4068173
- ▶ Lab Contact No. : 96698 89316, 98270 08819, 7089333892
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ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S) CERTIFIED LAB

Format No. : AL/FM/51D

## Test Report

### Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2207/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:20	Stack Attached To : NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs	Location : Near Guest House	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter (less than 10 µm ) or PM10	µg/m <sup>3</sup>	69.54	Max. 100	IS : 5182 (Part 23) 2006
2.	Particulate Matter (less than 2.5 µm) or PM2.5	µg/m <sup>3</sup>	31.66	Max. 60	AZSTP/ENV/004-00 Based on Guideline by CPCB NAAQMS/36/2012-13
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	19.37	Max. 80	IS : 5182 (Part 2) 2001
4.	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	24.77	Max. 80	IS : 5182 (Part 6) 2006
5.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	13.65	Max. 100	IS : 5182 (Part 09) 1974
6.	Lead (Pb)	µg/m <sup>3</sup>	BDL	Max. 1.0	IS : 5182 (Part 22) 2004
7.	Carbon Monoxide (CO)	µg/m <sup>3</sup>	697.38	Max. 2000	IS : 5182 (Part 10) 1999
8.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	26.43	Max. 400	AZSTP/ENV/008-00 Based on Guideline by CPCB NAAQMS/36/2012-13
9.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	Max. 05	IS : 5182 (Part 11) 2006
10.	Benzo (a) pyrene (BaP)	ng/m <sup>3</sup>	BDL	Max. 01	IS : 5182 (Part 12) 2004

### Remarks :

#### Note :

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5. MOEF Recognized environment Laboratory valid up to 28/02/2023(Q. 15018/02/2019)
6. NABL Accredited Lab (ISO /IEC 17025 :2017) Valid until 05/06/2023

  
Authorized Signatory

- ▶ \*Industrial & Environmental Pollution, \*Water & Effluent Water Testing, Drugs & Pharmaceutical, Biological/Microbiological Testing Services.
- ▶ \*Food & Agriculture Products Testing, \*Method Development & Validation (Pharma, Food & Environment).
- ▶ \*API Product (Process Development & Research), GMP/GLP Solution for Pharma/ Food Industry





# Azis Labs

- ▶ Works : Plot No. M-43, Sector-3, Pithampur 454774, Dist. Dhar, (M.P.) India
- ▶ City Office : 3/26, Vijay Nagar, Opp. Sayaji Hotel, Indore (M.P.) India, Tel. No.: 0731-4068173
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ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S) CERTIFIED LAB

Format No. : AL/FM/51D

## Test Report

Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2207/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:20

Stack Attached To: NA

Flue gas Velocity : NA

Sampling Duration : 24 Hrs

Location : Near Guest House

Flue gas Temperature : NA

Sampling By : Azis Labs

Ambient Temp. : 29°C

Diameter : NA

Wind Direction : From South West

Humidity : 68%

Analysis Start Date : 12/10/2022

Stack Height : NA

Fuel : NA

Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
11.	Arsenic (As)	ng/m3	BDL	Max. 06	AZSTP/ENV/009-00 Based on Guideline by CPCB NAAQMS/36/2012-13
12.	Nickel (Ni)	ng/m3	BDL	Max. 20	AZSTP/ENV/011-00 Based on Guideline by CPCB NAAQMS/36/2012-13

### Remarks :

#### Note :

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- ▶ \*Food & Agriculture Products Testing, \*Method Development & Validation (Pharma, Food & Environment).
- ▶ \*API Product (Process Development & Research), GMP/GLP Solution for Pharma / Food Industry





# Azis Labs

- ▶ Works : Plot No. M-43, Sector-3, Pithampur 454774, Dist. Dhar, (M.P.) India
- ▶ City Office : 3/26, Vijay Nagar, Opp. Sayaji Hotel, Indore (M.P.) India, Tel. No.: 0731-4068173
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ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S) CERTIFIED LAB

## Test Report

Format No. : AL/FM/51D

### Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2208/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:40	Stack Attached To: NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs	Location : Near Warehouse	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter (less than 10 µm ) or PM10	µg/m <sup>3</sup>	58.24	Max. 100	IS : 5182 (Part 23) 2006
2.	Particulate Matter (less than 2.5 µm) or PM2.5	µg/m <sup>3</sup>	28.91	Max. 60	AZSTP/ENV/004-00 Based on Guideline by CPCB NAAQMS/36/2012-13
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	15.72	Max. 80	IS : 5182 (Part 2) 2001
4.	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	20.57	Max. 80	IS : 5182 (Part 6) 2006
5.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	09.52	Max. 100	IS : 5182 (Part 09) 1974
6.	Lead (Pb)	µg/m <sup>3</sup>	BDL	Max. 1.0	IS : 5182 (Part 22) 2004
7.	Carbon Monoxide (CO)	µg/m <sup>3</sup>	598.12	Max. 2000	IS : 5182 (Part 10) 1999
8.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	20.75	Max. 400	AZSTP/ENV/008-00 Based on Guideline by CPCB NAAQMS/36/2012-13
9.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	Max. 05	IS : 5182 (Part 11) 2006
10.	Benzo (a) pyrene (BaP)	ng/m <sup>3</sup>	BDL	Max. 01	IS : 5182 (Part 12) 2004

### Remarks :

#### Note :

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- ▶ **Email** : info@azislabs.com, j.dingwani@azislabs.com, **Visit** : www.azislabs.in

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Format No. : AL/FM/51D

## Test Report

### Report issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2208/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:40	Stack Attached To: NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs	Location : Near Warehouse	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
11.	Arsenic (As)	ng/m <sup>3</sup>	BDL	Max. 06	AZSTP/ENV/009-00 Based on Guideline by CPCB NAAQMS/36/2012-13
12.	Nickel (Ni)	ng/m <sup>3</sup>	BDL	Max. 20	AZSTP/ENV/011-00 Based on Guideline by CPCB NAAQMS/36/2012-13

### Remarks :

#### Note :

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4. Specification as per MoEF & CC/CPCB/MPPCB.
5. MOEF Recognized environment Laboratory valid up to 28/02/2023(Q. 15018/02/2019)
6. NABL Accredited Lab (ISO /IEC 17025 :2017) Valid until 05/06/2023

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# Azis Labs

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Format No. : AL/FM/51D

## Test Report

### Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2209/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 14:00	Stack Attached To : NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs.	Location : Near SRP	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter (less than 10 µm ) or PM10	µg/m <sup>3</sup>	59.76	Max. 100	IS : 5182 (Part 23) 2006
2.	Particulate Matter (less than 2.5 µm) or PM2.5	µg/m <sup>3</sup>	30.41	Max. 60	AZSTP/ENV/004-00 Based on Guideline by CPCB NAAQMS/36/2012-13
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.95	Max. 80	IS : 5182 (Part 2) 2001
4.	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	23.50	Max. 80	IS : 5182 (Part 6) 2006
5.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	11.85	Max. 100	IS : 5182 (Part 09) 1974
6.	Lead (Pb)	µg/m <sup>3</sup>	BDL	Max. 1.0	IS : 5182 (Part 22) 2004
7.	Carbon Monoxide (CO)	µg/m <sup>3</sup>	586.84	Max. 2000	IS : 5182 (Part 10) 1999
8.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	23.62	Max. 400	AZSTP/ENV/008-00 Based on Guideline by CPCB NAAQMS/36/2012-13
9.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	Max. 05	IS : 5182 (Part 11) 2006
10.	Benzo (a) pyrene (BaP)	ng/m <sup>3</sup>	BDL	Max. 01	IS : 5182 (Part 12) 2004

### Remarks :

#### Note :

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Format No. : AL/FM/51D

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IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
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Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2209/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 14:00	Stack Attached To: NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs.	Location : Near SRP	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
11.	Arsenic (As)	ng/m3	BDL	Max. 06	AZSTP/ENV/009-00 Based on Guideline by CPCB NAAQMS/36/2012-13
12.	Nickel (Ni)	ng/m3	BDL	Max. 20	AZSTP/ENV/011-00 Based on Guideline by CPCB NAAQMS/36/2012-13

### Remarks :

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Format No. : AL/FM/51D

## Test Report

Report Issued to

IPCA LABORATORIES LIMITED DEWAS  
Plot No. 16 to 22, industrial area No.1  
A.B. Road  
Dewas (M.P.) MADHYA PRADESH

A.R No. : AIRM-2206/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:00	Stack Attached To: NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs	Location : Near Main Gate	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
1.	Particulate Matter (less than 10 µm ) or PM10	µg/m3	65.87	Max. 100	IS : 5182 (Part 23) 2006
2.	Particulate Matter (less than 2.5 µm) or PM2.5	µg/m3	30.41	Max. 60	AZSTP/ENV/004-00 Based on Guideline by CPCB NAAQMS/36/2012-13
3.	Sulphur Dioxide (SO2)	µg/m3	17.81	Max. 80	IS : 5182 (Part 2) 2001
4.	Nitrogen Dioxide (NO2)	µg/m3	22.61	Max. 80	IS : 5182 (Part 6) 2006
5.	Ozone (O3)	µg/m3	11.77	Max. 100	IS : 5182 (Part 09) 1974
6.	Lead (Pb)	µg/m3	BDL	Max. 1.0	IS : 5182 (Part 22) 2004
7.	Carbon Monoxide (CO)	µg/m3	688.40	Max. 2000	IS : 5182 (Part 10) 1999
8.	Ammonia (NH3)	µg/m3	28.31	Max. 400	AZSTP/ENV/008-00 Based on Guideline by CPCB NAAQMS/36/2012-13
9.	Benzene (C6H6)	µg/m3	BDL	Max. 05	IS : 5182 (Part 11) 2006
10.	Benzo (a) pyrene (BaP)	ng/m3	BDL	Max. 01	IS : 5182 (Part 12) 2004

Remarks :

Note :

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A.R No. : AIRM-2206/2022 - 2023  
Booking Date : 11/10/2022  
TRF Ref. No. : NA  
TRF Date : NA  
MFG. LIC. NO. : NA  
Issue Date : 17/10/2022

Sample Name : Ambient Air Monitoring

Sampling Date&Time : 09/10/2022 13:00	Stack Attached To: NA	Flue gas Velocity : NA
Sampling Duration : 24 Hrs	Location : Near Main Gate	Flue gas Temperature : NA
Sampling By : Azis Labs	Ambient Temp. : 29°C	Diameter : NA
Wind Direction : From South West	Humidity : 68%	Analysis Start Date : 12/10/2022
Stack Height : NA	Fuel : NA	Analysis End Date : 17/10/2022

SR	CHARACTERISTIC	UNIT	RESULT	SPECIFICATION	METHOD OF TEST
11.	Arsenic (As)	ng/m3	BDL	Max. 06	AZSTP/ENV/009-00 Based on Guideline by CPCB NAAQMS/36/2012-13
12.	Nickel (Ni)	ng/m3	BDL	Max. 20	AZSTP/ENV/011-00 Based on Guideline by CPCB NAAQMS/36/2012-13

### Remarks :

#### Note :

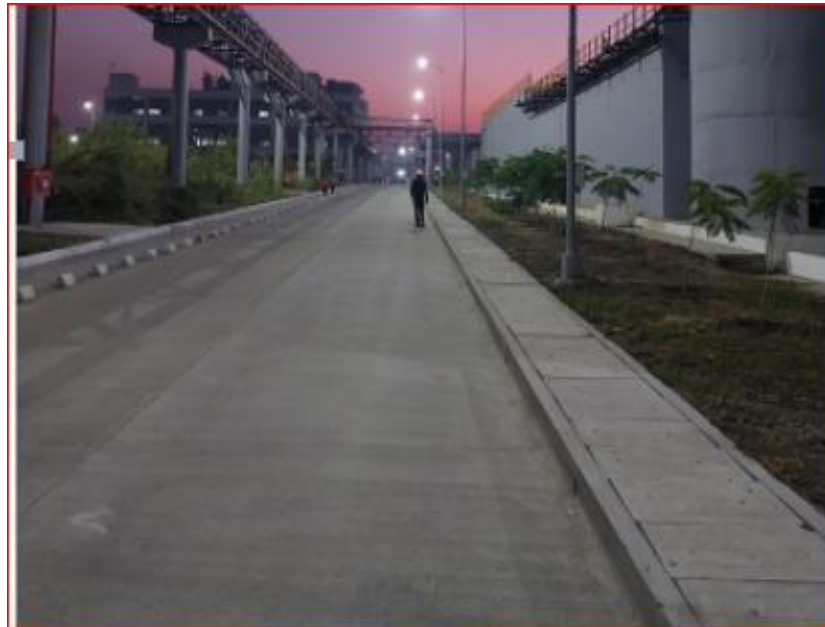
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**Annexuer-15**  
**RCC Road with Pavers**



## Fly Ash Storage Area



## Coal Storage Shed





## Air Pre Heater in Boiler



## Multi Cyclone in Boiler



ANNEXURE-16

Scrubber





**ANNEXURE-17**

**Covered Truck for RM/PM Transportation**



# **Annexure-18**

## **HAZOP STUDY**



**HAZOP STUDY**  
**IPCA LABORATORIES LTD**  
**DEWAS**

---

**HAZOP STUDY OF**  
**INTERMEDIATE**  
**LASAMIDE**

## TABLE OF CONTENTS

Sr. No.	Content	Page No.
1	Scope of Study	I
2	Brief Manufacturing Process	II
3	Brief Summary of Recommendations	III
4	Parameters and Guidewords	IV
5	Hazop Study Team	V
6	Risk Assessment Ranking (Risk Matrix)	VI
7	List of Nodes Considered	VIII
8	Reference Documents	IX
9	Hazop Worksheets of Lasamide	X

### 1. SCOPE OF THE STUDY

The purpose of this report is to present the results of HAZOP study sessions conducted for product Lasamide by the HAZOP team. The purpose of the study was to identify and evaluate hazard and operability problems associated with the processes and operations during manufacturing Lasamide and determine further actions required.

Specifically, the main objectives of this HAZOP study were to:

- Identification and qualitative evaluation of EHS hazards and operability problems associated with the Lasamide manufacturing operations.



- Make recommendations to control the hazards and improve operability problems considering the existing control measures.
- Submit a report detailing HAZOP study results and recommendations.

The study scope mainly includes the deputation of HAZOP leader and secretary at the site:

- To ensure effective and productive use of HAZOP methodology
- To streamline the HAZOP procedures
- To lead the HAZOP team
- To monitor the HAZOP study
- To prepare and review the HAZOP report

This report is limited to the operations and/or process specifically identified in the report and is based on the information, drawings, safety data and documents provided by the production and referred by the HAZOP team during the study phase of the project. Additional or different precautions may be required in areas outside the scope of this study, in response to changing conditions and conditions that could have not been reasonably foreseen, or if different materials having different hazard characteristics are handled or processed.

## **2. BREIF MANUFACTURING PROCESS**

### **Principle:**

2,4-DCBA reacts with CSA gives chloro compound, chloro compound reacts with ammonia solution and precipitant with H<sub>2</sub>SO<sub>4</sub> -water mixture, that produce lasamide crude. Lasamide crude precipitation with H<sub>2</sub>SO<sub>4</sub> gives Lasamide intermediate.

### **Process:**

- 1) Charge Chlorosulphonic acid
- 2) Slowly charge 2,4 Dichloro Benzoic Acid
- 3) Apply steam to the reactor I/GLR-05 and heat the reaction mass 140±2°C.
- 4) Transfer the chloromass from reactor to receiver by transferring pump.
- 5) Meanwhile charge D.M Water in reactor . Apply brine and chill below 5°C . Apply brine to and chill below 5°C.
- 6) Quench the Chloromass slowly from receiver at ambient temperature.
- 7) Transfer the product mass to CNF. Apply air pressure to remove the maximum M.L.
- 8) Wash the filtered cake with D.M Water.
- 9) Release air pressure and open manhole of CNF. Unload the wet cake in HDPE dedicated container with single poly bag.

## **3. BRIEF SUMMARY OF RECOMMENDATIONS DURING THE HAZOP STUDY OF PRODUCT LASAMIDE**

- Periodically survey of trolley, palettes, lift, CSA transfer system etc.
- Chain support to be provided to the trolley.
- Ensure proper rigid support to CSA transferring pipe lines

- Use flange guards in transfer line for CSA .
- Spill kit (Carbon ash) /sand buckets to be provided in the plant.
- To be provide flange guards for chloromass transfer lines.
- Periodically clean air pressure suit.
- Ensure operating persons wearing full body pressure suit, hand gloves, safety shoes.

#### **4. PARAMETERS AND GUIDEWORDS**

<b>PARAMETER</b>	<b>GUIDE WORDS</b>
<b>FLOW</b>	More
	Less / None
	Reverse
<b>PRESSURE/VACUUM</b>	High
	Low
<b>TEMPERATURE</b>	High
	Low
<b>LEVEL</b>	High
	Low
<b>COMPOSITION</b>	Part Of (Something Missing)



	As Well As (Something Extra)
	Other Than (Something Different)
<b>OTHERS</b>	Sampling
	Loss of utilities (power, steam, air, nitrogen, water)
	Missing
	Breaking of vacuum
	Emergency response
	Spillage

## **5. HAZOP STUDY TEAM**

All the members participated in the HAZOP study of Lasamide. Their relevant discipline, job title, their role and department is described in Table given below

### **Details of HAZOP study team members**

<b>Name</b>	<b>Qualification</b>	<b>Job Title</b>	<b>Role / Represents</b>
Mr.Pankaj Sharma	M.SC	Production	Leader
Mr.Gaurav Shukla	M.SC	Process Chemistry Excellence	Team Member
Mr.Sanket Gujrathi	B.E in Mechanical Engineering	Engineering	Team Member
Mr.Ankit Joshi	B.E in Chemical Engineering	PSM	Team Member
Mr.Rahul Agriwal	B.E in Fire Safety	EHS	Team Member

Note: All members were present throughout the HAZOP study.

### **RISK ASSESSMENT RANKING (RISK MATRIX)**

This HAZOP study includes the risk rating, which will combine the severity and likelihood of an event into a risk category. A risk rating matrix (as shown below at figure) in which the likelihood and severity of an event are subdivided into discrete regions and the combination of each likelihood/severity pair is assigned a risk rating category will be used for the study. In a simple case the likelihood and severity could be divided into five categories numbered from 1 to 5 and the risk category could be designated as follows which varies from 1 (Intolerable risk) to 10 (very low risk).

## 6. RISK RATING MATRIX:

	SEVERITY					
		1	2	3	4	5
LIKELIHOOD	1	1	2	3	4	5
	2	2	4	6	7	8
	3	3	6	7	8	9
	4	4	7	8	9	10
	5	5	8	9	10	10



**INTOLERABLE**



**INCORPORATE RISK REDUCTION MEASURE**



**MANAGE FOR CONTINUOUS IMPROVEMENT**

### Relative Severity of Various Hazardous Categories:

Severity	Explanation	Rating
Serious	Imminent danger. The hazard is capable of causing major accident scenario such as fire, explosion, toxic release etc. leading to multiple deaths, widespread illness and loss of facility.	5
High	The hazard can result in serious property and equipment damage, operational disruption, multiple severe injuries or serious illness.	4



Medium	The hazard can cause property and equipment damage, operational disruption, severe injuries or serious illness but they would not be serious in nature.	3
Low	The hazard can cause minor operational disruption and first aid injuries or illness.	2
Very Low	Operational disruption & discomfort at nuisance level.	1

#### Quantitative Probability Estimate:

Likelihood	Explanation	Rating
High	Imminent. Likely to occur immediately	5
Moderate	Likely to occur within a short period of time	4
Medium	Reasonably probable. Probably the event will occur in time.	3
Low	Remote. May occur in time.	2
Very Low	Extremely remote. Unlikely to occur.	1

#### 7. HAZOP STUDY NODES OF LASAMIDE:-

Node No.	Node Description
01	Transferring polythene bags of 2,4 DCBA & Pumping CSA from RM store to Production area.
02	Transferring CSA from intermediate tank and 2,4 DCBA to GLR
03	Scrubber operation
04	Transfer the Chloromass from reactor to receiver by transferring pump.
05	Charging of 4000 L D.M Water in reactor
06	Quench the Chloromass C/MSCMH-01 to C/GLR-01/C/GLR-03/C/GLR-08
	Transfer the product mass to closed Nutch filter and Apply air pressure

07	Release air pressure and open manhole of CNF. Unload the wet cake in HDPE dedicated container with single poly bag.
----	---

## **8. REFERENCE DOCUMENTS**

The following drawings and documents were referred during HAZOP study of Lasamide:-

1. Process & Instrumentation or line Diagrams: Diagram Sheet attached.
2. Process Flow Diagram: Diagram Sheets attached.
3. Batch Production and Control Record for Lasamide.
4. MSDS for all raw material & final product

<b>MPCR No.</b>	<b>Title</b>
	<b>LASYL CHLORIDE</b>
	<b>LASAMIDE (CRUDE)</b>
	<b>LASAMIDE (PURE)</b>

## **9. HAZOP WORKSHEETS OF LASMIDE**



<b>Study Title</b>		Transferring polythene bags of 2,4 DCBA & pumping CSA from RM store to Production area. (RM Transfer)										
<b>Drawing No.</b>		Lasamide PFD, Stg-1		Revision No.- NIL		Node-01		Date		05.01.2021		
<b>HAZOP Team</b>		Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal										
<b>Part Considered</b>		Transferring polythene bags of 2,4 DCBA from RM store to Production area.				<b>Equipment used:-</b>		GLR-05,MSRC				
<b>Design intent</b>		PRES.	TEMP	FLOW	VACU.	<b>Material :</b>		2,4 DCBA & CSA				
<b>To transfer all raw materials from RM Store to Production floor.</b>		Amb	Amb		----	<b>Source :</b>		RM Store				
<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>		<b>Possible consequences</b>		<b>Measures/Existing facilities safeguard</b>			<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>

Other-Spillage, splash	Other than	Damage of polythene bags.	Health hazard Environment pollution	Operators provided safety shoes, hand gloves, goggles & cartridge masks Sand buckets provided Regularly training on handling of hazardous chemicals	3	2	6	Use of Second container like pallets with with spill hold up provision
Other-spillage of material on floor	Other than	CSA line damages or leakages due to damage of gasket or line degradation.  Over flow of CSA from intermediate tank.  Leakages from transfer pump.	Floor nuisance  Emission of CSA Vapour due to moisture in air or water in contact with CSA.  Injury due to CSA in contact to person in vicinity  Health hazard  Environment pollution	Persons trained for CSA transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in CSA line.  Operation in presence of supervisor.  Carbon ash for spill kit.	3	2	6	Use PVC suit while removing CSA trap material.  Need to implement Automation for level control in intermediate tank.  automation for transfer in intermediate tank.



**Table: 4.2 HAZOP STUDY WORKSHEET**

<b>Study Title</b>	<b>Transferring CSA from intermediate tank and 2,4 DCBA to GLR</b>						
<b>Drawing No.</b>	<b>Lasamide PFD, Stg-1</b>	<b>Revision No.- NIL</b>			<b>Node-02</b>	<b>Date</b>	<b>05.01.2022</b>
<b>HAZOP Team</b>	<b>Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal</b>						
<b>Part Considered</b>	<b>Transferring CSA, 2,4 DCBA (RM Charging)</b>				<b>Equipment used:-</b>	<b>GLR-12</b>	
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	<b>CSA, 2,4 DCBA</b>	
<b>To transferring CSA &amp; 2,4 DCBA to GLR .</b>	<b>Amb</b>	<b>Amb</b>		<b>----</b>	<b>Source :</b>	<b>RM storage , CSA storage tank</b>	

<b>Study Title</b>	<b>Scrubber operation</b>
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<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
spillage of CSA	Other than	CSA line damages or leakages due to damage of gasket or line degradation, in case of shut off valve on transfer line.  Leakages from transfer pump.	Health hazard  Environment pollution	Persons trained for CSA transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in CSA line.  Operation in presence of supervisor.  Carbon ash for spill kit.  Ensure all valves before start of CSA pump.	3	2	6	Require physical supervision and operation as per checklist. Require interlock to CSA transfer pump, by installing ON/Off valve.
Splash of 2,4 DCBA	Other than	Damage of polythene bags.  Manual charging with scoop.	Health hazard  Environment pollution  Exposure to dust particles at the time of addition of 2,4 DCBA in CSA , due to CSA fumes.	Operators provided safety shoes, hand gloves, goggles & cartridge masks, PVC suit.  Regularly training on handling of hazardous chemicals	3	2	6	Supervision and training required and operation as per checklist.



<b>Drawing No.</b>	Lasamide PFD, Stg-1		Revision No.- NIL		Node-03		Date	05.01.2022				
<b>HAZOP Team</b>	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agrawal											
<b>Part Considered</b>	Transferring CSA, 2,4 DCBA (RM Charging)				Equipment used:-							
<b>Design intent</b>	PRES.	TEMP	FLOW	VACU.		Material :	CSA					
<b>To transferring CSA &amp; 2,4 DCBA to GLR .</b>	Amb	Amb		----		Source :	RM storage , CSA storage tank					
<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>		<b>Possible consequences</b>		<b>Measures/Existing facilities safeguard</b>			<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
No flow of Scrubbing media	No/Not	Scrubbing media (Water) pump is off and no flow of water.		Health hazard Environment pollution  Chloromass vapours will pollute the environment and cause the inhalation problem near scrubber system.		Proper supervision of operation of scrubber. Ensure the flow of scrubbing media. Ensure scrubbing media Pump in operation.			2	2	4	Require physical supervision and operation as per checklist.





<b>Study Title</b>	Transfer the Chloromass from reactor to receiver by transferring pump.								
<b>Drawing No.</b>	Lasamide PFD, Stg-1	<b>Revision No.-</b> NIL			<b>Node-04</b>	<b>Date</b>	05.01.2022		
<b>HAZOP Team</b>	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal								
<b>Part Considered</b>	Transfer the Chloromass to receiver				<b>Equipment used:-</b>	MSRC			
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	Chloromass			
<b>To transfer the Chloromass from reactor to receiver.</b>	Amb	Amb		----	<b>Source :</b>	RM storage , CSA storage tank			
<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>		<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
spillage of Chloromass	Other than	Chloromass line damages or leakages due to damage of gasket or line degradation, in case of shut off valve on transfer line.  Leakages from transfer pump.  Over flow of chloromass from receiver.		Health hazard Skin injury in case of contact with skin.  Environment pollution	Persons trained for chloromass transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in chloromass transfer line.  Operation in presence of supervisor.  Carbon ash for spill kit.  Ensure all valves before start of pump.	2	2	4	Require physical supervision and operation as per checklist..

<b>Study Title</b>		<b>Charging of 4000 L D.M Water in reactor</b>										
<b>Drawing No.</b>		Lasamide PFD, Stg-1		Revision No.- NIL		Node-05		Date	05.01.2022			
<b>HAZOP Team</b>		Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal										
<b>Part Considered</b>		Charging of 4000 L D.M Water in reactor				<b>Equipment used:-</b>	GLR-12					
<b>Design intent</b>		PRES.	TEMP	FLOW	VACU.	<b>Material :</b>	DM water					
<b>TO Charge 4000 L D.M Water in reactor</b>		Amb	Amb		----	<b>Source :</b>	DM plant					
<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>		<b>Possible consequences</b>		<b>Measures/Existing facilities safeguard</b>			<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
Spillage of DM water on floor	Other than	DM water line leaking due to pump in shut off condition.  DM water pump leaking.		Trip Hazard		Persons trained for DM water transfer pump operation.  Operation in presence of supervisor.  Ensure all valves before start of pump.			2	1	2	Require physical supervision.



<b>Study Title</b>	<b>Quench the Chloromass</b>				
<b>Drawing No.</b>	<b>Lasamide PFD, Stg-1</b>	<b>Revision No.- NIL</b>		<b>Node-06</b>	<b>Date</b> <b>05.01.2022</b>
<b>HAZOP Team</b>	<b>Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal</b>				
<b>Part Considered</b>	<b>Quench the Chloromass</b>			<b>Equipment used:-</b>	<b>GLR-12,MSRLCNF</b>
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b> <b>Chloromass</b>
<b>Quench the Chloromass</b>	<b>Amb</b>	<b>Amb</b>		<b>----</b>	<b>Source :</b> <b>Chloromass receiver</b>

<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
spillage of Chloromass	Other than	Chloromass line damages or leakages due to damage of gasket or line degradation, .	Health hazard Skin injury in case of contact with skin.  Environment pollution	Persons trained for chloromss transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in chloromass transfer line.  Operation in presence of supervisor.  Carbon ash for spill kit.  Ensure all valves before start of pump.	2	2	4	Require physical supervision with checklist.



<b>Study Title</b>	Transfer the product mass to Nutch filter and Apply air pressure											
<b>Drawing No.</b>	Lasamide PFD, Stg-1		Revision No.- NIL			Node-07		Date		05.01.2022		
<b>HAZOP Team</b>	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal											
<b>Part Considered</b>	Transfer the product mass to Nutch filter					<b>Equipment used:-</b>		MSRLCNF				
<b>Design intent</b>	PRES.		TEMP		FLOW		VACU.		<b>Material :</b> Chloromass			
<b>Deviation from Design Intent</b>	<b>Guide Words</b>	<b>Possible causes</b>			<b>Possible consequences</b>		<b>Measures/Existing facilities/Source :</b>		<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
Exceeded air pressure in filtration	More	Pressure gauge malfunctioning. No supervision.			Health Hazard Environment Hazard, Busting of outlet piping. Damage of CNF Human Injury		Persons trained CNF operation.  Operation in presence of supervisor.  Ensure bottom valve of CNF is in open condition.  Preventive maintenance of CNF.  Preventive testing of instruments like pressure gauge, PRV etc.		2	2	4	Require physical supervision with checklist of operation activity  Engineering control.
Exceeded air pressure in cake washing	More	Pressure gauge malfunctioning. No supervision.			Health Hazard Environment Hazard, Busting of outlet piping. Damage of CNF Human Injury		Persons trained CNF operation.  Operation in presence of supervisor.  Ensure bottom valve of CNF is in open condition.  Preventive maintenance of CNF.  Preventive testing of instruments like		2	2	4	Require physical supervision with checklist of operation activity  Engineering control.

				pressure gauge, PRV etc.				
spillage of Chloromass	Other than	Chloromass line damages or leakages due to damage of gasket or line degradation, in case of shut off valve on transfer line.  Leakages from transfer pump.	Health hazard Skin injury in case of contact with skin.  Environment pollution	Persons trained for chloromass transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in chloromass transfer line.  Operation in presence of supervisor.  Carbon ash for spill kit.  Ensure all valves before start of pump.	2	2	4	Require physical supervision and operation as per checklist..
<b>Study Title</b>	<b>Release air pressure and open manhole of CNF. Unload the wet cake in HDPE dedicated container with single poly bag.</b>							



<b>Drawing No.</b>	Lasamide PFD, Stg-1			<b>Revision No.-</b> NIL	<b>Node-08</b>	<b>Date</b>	05.01.2022
<b>HAZOP Team</b>	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agrawal						
<b>Part Considered</b>	Cake unloading				<b>Equipment used:-</b>	C/MSRLCNF-07/C/MSRLCNF-05	
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	Wet Chloromass cake	
<b>TO unload the cake</b>	<b>Amb</b>	<b>Amb</b>		----	<b>Source :</b>	C/MSRLCNF-07/C/MSRLCNF-05	

<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
Sudden drop in air pressure	Other than	Air valve malfunctioning. Human error.	Damage of filter cloth support due to Contraction of equipment or sudden jerk.	Persons trained CNF operation. Operation in presence of supervisor. Preventive maintenance of CNF. Preventive testing of valve pressure gauge etc.	2	2	4	Require physical supervision with checklist of operation activity  Engineering control.
Spillage of cake slurry	less	No proper filtration due low air pressure  Pressure gauge malfunctioning.  No supervision.	Health Hazard  Environment Hazard,	Persons trained CNF operation. Operation in presence of supervisor. Preventive maintenance of CNF.	2	4	4	Require physical supervision with checklist of operation activity  Engineering control.

Splash of Cake material	Other than	Wrong operation of product removal. Human Error. Tripping in case of floor is wet.	Health hazard  Environmental hazard	Persons trained CNF operation. Operation in presence of supervisor. Provided PPEs as per PPE matrix	2	3	6	Require physical supervision with checklist of operation activity.
<b>Study Title</b>	<b>Charging Liq. Ammonia in reactor from receiver. Slowly charge wet Lasyl Chloride reactor</b>							
<b>Drawing No.</b>	<b>Lasamide PFD, Stg-2</b>	<b>Revision No.- NIL</b>	<b>Node-09</b>	<b>Date</b>	<b>05.01.2022</b>			
<b>HAZOP Team</b>	<b>Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal</b>							



<b>Part Considered</b>	<b>Charging Liq. Ammonia</b>				<b>Equipment used:-</b>	<b>I/SSR-05</b>
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	Liq. Ammonia,
<b>TO Charge Liq. Ammonia</b>	<b>Amb</b>	<b>Amb</b> <b>50°C.</b>		----	<b>Source :</b>	<b>Stage-1 Lasyl chloride cake material</b>

<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
spillage of Ammonia	Other than	Ammonia line damages or leakages due to damage of gasket or line degradation, in case of shut off valve on transfer line or venting is closed.  Leakages from transfer pump.	Health hazard Human injury  Environment pollution	Persons trained for ammonia transfer & handling of hazardous chemicals.  Reactor vent is outside the plant.  Provided all necessary PPE's.  Flange guards need to provide to flanges in Ammonia line.  Operation in presence of supervisor.  Ensure all valves before start of ammonia pump.	3	2	6	Require physical supervision and operation as per checklist.
spillage of Ammonia	More	Ammonia may spill while transferring the required quantity of ammonia from Main Ammonia tank to intermediate receiver tank.	Health hazard Human injury  Environment pollution	Persons trained for ammonia transfer & handling of hazardous chemicals.  Provided all necessary PPE's.  Flange guards need to provide to flanges in Ammonia line.  Operation in presence of supervisor.	3	2	6	Require physical supervision and operation as per checklist. Require interlock to Ammonia transfer pump, by installing ON/Off Solenoid valve.
Exposure to Lasyl chloride and ammonia gas	More	Ammonia emits at the time of charging the Lasyl chloride material, if charges fast.	Health hazard  Environment pollution	Provided all necessary PPE's. (PVC air suit)  Operation in presence of supervisor.  Ensure all valves before start of ammonia pump.	2	2	4	Require physical supervision and operation as per checklist.  PTS system to charge Lasyl Chloride
<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>

Spread of Ammonia gas	No/Not	Ammonia gas may spread in premises if there is no efficient ammonia scrubbing system.  No sufficient quantity of scrubbing media provided.  Scrubbing media (Water ) Pump malfunctioning.  No replacement of media for long term	Health hazard Human injury  Environment pollution	Ammonia scrubber provided.  Provided all necessary PPE's.  Operation in presence of supervisor.  Vacuum ejector water is replaced time to time.	3	2	6	Require physical supervision and operation as per checklist.  Required efficient in line scrubbing system of vacuum ejector.
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<b>Study Title</b>	<b>Refilling H2SO4 to intermediate overhead storage tank. Charging H2SO4 &amp; DM water to Reactor</b>							
<b>Drawing No.</b>	<b>Lasamide PFD, Stg-2</b>	<b>Revision No.- NIL</b>			<b>Node-10</b>	<b>Date</b>	<b>05.01.2022</b>	
<b>HAZOP Team</b>	<b>Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal</b>							
<b>Part Considered</b>	<b>Refilling of H2SO4 to Reactor</b>				<b>Equipment used:-</b>	<b>I/GLR-13</b>		
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	<b>H2SO4, DM water</b>		
<b>Part of process</b>	<b>Amb</b>	<b>Amb</b>		<b>----</b>	<b>Source :</b>	<b>RM store H2SO4 Carboy, Intermediate H2SO4 tank, DM plant</b>		

		30±5°C			
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<b>Study Title</b>	<b>Transfer the reaction mass from SSR to GLR for pH adjustment under stirring.</b>
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<b>Deviation</b>	<b>Guide Words</b>	<b>Possible causes</b>	<b>Possible consequences</b>	<b>Measures/Existing facilities safeguard</b>	<b>S</b>	<b>L</b>	<b>R</b>	<b>Action Required</b>
Spillage of H <sub>2</sub> SO <sub>4</sub> due to material on floor due to exothermic reaction	Other than	<p>Be careful of Carboy.</p> <p>Fall down of carboy while transferring H<sub>2</sub>SO<sub>4</sub></p> <p>Carboys from store to Production area.</p>	<p>Health hazard</p> <p>Environment pollution</p>	<p>Operator provided safety action ahead of time, PPE's &amp; provided as per SOP. Buckets provided</p> <p>By providing hand dig of hazardous chemicals.</p> <p>Additional helper provided with Forklift driver.</p> <p>Carboys are bound with belt, are with proper NFPA labels during transportation.</p>	3	2	0	<p>Use of Secondary container required</p> <p>Periodical maintenance of trolley, Lift, forklift required.</p>
Splash of H <sub>2</sub> SO <sub>4</sub> under vacuum charging	Other than	<p>Vacuum drop at the time of refilling.</p> <p>Human error.</p> <p>No cleaning of traces of water from intermediate tank and pipes before refilling, if any.</p>	<p>Health hazard</p> <p>Human injury</p> <p>Environment pollution</p>	<p>Provided all necessary PPE's.</p> <p>Operation in presence of supervisor.</p>	4	3	12	<p>Require secondary container with suitable spill kit media for H<sub>2</sub>SO<sub>4</sub> carboy.</p> <p>Required efficient NRV in suction line of H<sub>2</sub>SO<sub>4</sub>.</p> <p>Require Suitable pumping mechanism for refilling H<sub>2</sub>SO<sub>4</sub>.</p>
Exothermic reaction of water & H <sub>2</sub> SO <sub>4</sub>	More	<p>Fast addition of of H<sub>2</sub>SO<sub>4</sub></p> <p>In water.</p>	<p>Health Hazard</p> <p>Environmental hazard.</p>	Activity performed in supervision.	1	2	2	Require physical supervision and operation as per checklist.



<b>Drawing No.</b>	<b>Lasamide PFD, Stg-2</b>			<b>Revision No.- NIL</b>	<b>Node-11</b>	<b>Date</b>	<b>05.01.2022</b>
<b>HAZOP Team</b>	<b>Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal</b>						
<b>Part Considered</b>	<b>Transferring of ammonia, lasyl chloride material</b>				<b>Equipment used:-</b>	<b>SSR-05/GLR-13</b>	
<b>Design intent</b>	<b>PRES.</b>	<b>TEMP</b>	<b>FLOW</b>	<b>VACU.</b>	<b>Material :</b>	<b>Ammonia lasyl chloride mass</b>	
<b>To adjust the pH</b>	<b>Amb</b>	<b>&gt;70°C</b>		<b>----</b>	<b>Source :</b>	<b>Reactor</b>	
<b>Study Title</b>	<b>Transfer the reaction mass from GLR to SSCF. Apply air from top to remove the maxm mother liquor. cake washing.</b>						

Drawing No.	Lasamide PFD, Stg-2	Revision No.- NIL	Node-12	Date	05.01.2022
HAZOP Team	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal				
Part Considered	Air pressure	Equipment used:-	I/GLR-13,I/SSCF-01/02		
Design intent	PRES.	TEMP	FLOW	VACU.	Material : Ammonia lasyl chloride mass with H2SO4
To filter the mass	Amb	45-50°C		----	Source : Reactor, Centrifuge

Deviation	Guide Words	Possible causes	Possible consequences	Measures/Existing facilities safeguard	S	L	R	Action Required
Exceeded air pressure in filtration	More	Pressure gauge malfunctioning. No supervision.	Health Hazard Environment Hazard, Busting of outlet piping. Damage of ANF Human Injury	Persons trained ANF operation. Operation in presence of supervisor. Ensure bottom valve of CNF is in open condition. Preventive maintenance of ANF. Preventive testing of instruments like pressure gauge, PRV etc.	2	2	4	Require physical supervision with checklist of operation activity  Engineering control.
Exceeded air pressure in cake washing	More	Pressure gauge malfunctioning. No supervision.	Health Hazard Environment Hazard, Busting of outlet piping. Damage of ANF Human Injury	Persons trained ANF operation. Operation in presence of supervisor. Ensure bottom valve of CNF is in open condition. Preventive maintenance of ANF. Preventive testing of instruments like pressure gauge, PRV etc.	2	2	4	Require physical supervision with checklist of operation activity  Engineering control.

Deviation	Guide Words	Possible causes	Possible consequences	Measures/Existing facilities safeguard	S	L	R	Action Required
Sudden drop in air pressure	Other than	Air valve malfunctioning. Human error.	Damage of filter cloth support due to Contraction of equipment or sudden jerk.	Persons trained ANF operation. Operation in presence of supervisor. Preventive maintenance of ANF. Preventive testing of valve pressure gauge etc.	2	2	4	Require physical supervision with checklist of operation activity  Engineering control.
Spillage of cake slurry	less	No proper filtration due low air pressure  Pressure gauge malfunctioning.  No supervision.	Health Hazard  Environment Hazard,	Persons trained ANF operation. Operation in presence of supervisor. Preventive maintenance of ANF.	2	4	4	Require physical supervision with checklist of operation activity  Engineering control.
Splash of Cake material	Other than	Wrong operation of product removal. Human Error. Tripping in case of floor	Health hazard  Environmental hazard	Persons trained ANF operation. Operation in presence of supervisor. Provided PPEs as per PPE matrix	2	3	6	Require physical supervision with checklist of operation activity.



		is wet.						
Crude product in contact with skin	Other than	Human Error	Health Hazard	Provided PPEs as per PPE matrix	2	1	2	PPE matrix need to review.
<b>Study Title</b>	<b>After removal of maximum ML release the air pressure. Open the manhole of SSCF, Unload the material in dedicated HDPE carboys with single poly bag. Sampling.</b>							
<b>Drawing No.</b>	Lasamide PFD, Stg-2	Revision No.- NIL		Node-1	Date	05.01.2022		
<b>HAZOP Team</b>	Mr.Pankaj Sharma,Mr.Gaurav Shukla,Mr.Sanket Gujrathi,Mr.Ankit Joshi,Mr.Rahul Agriwal							
<b>Part Considered</b>	Air pressure			Equipment used:-	II/SSCF-01/02			
<b>Design intent</b>	PRES.	TEMP	FLOW	VACU.	Material :	Crude Lasamide		
<b>To remove the cake</b>	Amb	Amb°C		----	Source :	Crude filtered material from C/SSCF-02 /B/SSCF-01		

## Annexure No. 19

Chilled Brine Plant



Condenser







## Annexure-20

### Closed Chemical Handling System For Reactors



**Annexure-21**

**GGEPI Agreement**

**Copy**





मध्य प्रदेश MADHYA PRADESH

BN 563747

AGREEMENT

THIS AGREEMENT is made on this 20<sup>th</sup> day of December 2021

between

**M/s. Green Gene Enviro Protection and Infrastructure Private Limited** [Earlier known as Gujarat Enviro Protection and Infrastructure (D and NH) Private Limited), (**hereinafter referred to as "GGEPI" or "The Company"**) a company incorporated and registered under the provisions of the Companies Act 1956/2013 and having its registered office at 370, SVP Road, Shop-8, Plot 384, Cigaretwala Buidling, Opp. Central Bank of India, Prathana Samaj, Nr. Harkishndas Hospital, Mumbai-400004, Maharashtra (CIN: U73100MH2005PTC262100, PAN: AACCG6016F) which expression shall unless repugnant to the context or meaning thereof shall mean and include its successors, assignees etc. of FIRST PART

and

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

Page 1 of 15





M/s. IPCA Laboratories Ltd., DEWAS which is a Company / Partnership Firm / Proprietary Concern / Society / Association / Co-operative Management duly incorporated under the Provisions of Companies Act- 1956 / 2013 and having its registered office at IPCA Laboratories Ltd. 48 , Kandiwali Industrial Estate, Kandiwali (West) , Mumbai- 400 067 (M.P.) and factory/works at M/s IPCA Laboratories Ltd., DEWAS (hereinafter referred to as "The Generator") which expression shall unless repugnant to the context of meaning thereof shall mean and include its successors, assignees etc. of the OTHER PART.

### Whereas

- 1) GGEPI is inter alia engaged in the business activities of development, operations and maintenance of infrastructure projects for hazardous waste management. The Waste Mix Processing Facility Project has been granted Consent to Establish from Rajasthan State Pollution Control Board (RSPCB).
- 2) GGEPI has implemented the project for Waste Mix Processing facility (WMPF) located at S.No. 2709 to 2712, Village- Singhpur, Nr. Toll Naka, Teh- Kapasan, Dist- Chittorgarh, Rajasthan and obtained Consent to Operate (CTO), to operate the Waste Mix Processing facility (WMPF) from Rajasthan State Pollution Control Board (RSPCB). vide 2018-19/HSW/4038 dated 25/09/2018 Under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981 and Authorization Number RPCB/HWM/2018-2019/HSW/HSW/253 dated 25/09/2018 under The Environment (Protection) Act, 1986 and Hazardous and other Waste (Management, Handling and Transboundary) Rules, 2016 and amended thereafter (Herein after referred to as "The Rules").
- 3) The Other Party (also referred to as "the Generator") is inter alia engaged in the business activities relating to Manufacturing of Pharmaceutical Products –API and Bulk Drugs Intermediates and is generating Hazardous Liquid/Semi Solid/Solid Waste (hereinafter referred to as "Hazardous Waste")
- 4) The Generator is desirous of sending its Hazardous Waste at Waste Mix Processing Facility, Chittorgarh and shall get authorization from MPPCB to send hazardous waste at GGEPI Chittorgarh Unit.
- 5) GGEPI has agreed to accept and manage the Hazardous Waste of the Generator at its Chittorgarh Unit on its commissioning and whereas the Generator agrees to send its Hazardous Waste to GGEPI on the terms and conditions stated hereunder.

### DEFINITIONS & INTERPRETATIONS

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

- 1.1 "TIME" shall be stated in Hours and shall mean Indian Standard Time.
- 1.2 "DAY" means a period of twelve (12) consecutive hours beginning at 08.00 hours and ending at 20.00 hours.
- 1.3 "WEEK" means a period of seven (7) consecutive days beginning from a day.
- 1.4 "MONTH" means a period beginning at 8.00 hours on the first day of Calendar Month and ending at 20.00 hours on the last day of same Calendar Month.
- 1.5 "YEAR" means a period of three hundred and sixty five (365) consecutive days or three hundred and sixty six (366) consecutive days when such period includes a twenty ninth (29th) day of February beginning at 8.00 hours from a day.
- 1.6 "FINANCIAL YEAR" means a year starts from 1st day of April month of the year and ending on 31<sup>st</sup> day of March month of next year.
- 1.7 "CONTRACTED QUANTITY" means the quantity of suitable waste streams for which the generator is entering into the agreement.
- 1.8 The headings of or title to the Clauses in this AGREEMENT shall not be deemed to be a part thereof or be taken into consideration in the interpretation of construction thereof of the AGREEMENT.
- 1.9 Word imparting the singular only also include the plural and vice versa where the contexts so require.
- 1.10 Reference to an individual shall include his legal representative, successor, legal heir, executor and administrator.
- 1.11 "WMPF": Waste Mix Processing Facility
- 1.12 Abbreviations;
- a) RSPCB means Rajasthan State Pollution Control Board
  - b) GPCB means Gujarat Pollution Control Board
  - c) MPPCB means Madhya Pradesh Pollution Control Board
  - d) CPCB means Central Pollution Control Board
  - e) MoEF means Ministry of Environment and Forests

**Now Therefore Those Present Witnesses and it is hereby declared and agreed by and between the Parties hereto as follows:**

**01. SCOPE OF AGREEMENT**

GGEPI shall manage the Hazardous Waste of Generator at its Waste Mix Processing Facility, Chittorgarh, Rajasthan as specified in the Rules.

**02. DATE OF AGREEMENT & PERIOD OF CONTRACT:**

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

This Agreement is valid for a period of 5 years from the date M/s IPCA Laboratories Ltd. submit its Authorization letter issued by MPPCB and pay all the charges/Fees/Security Deposits to send its waste at GEPIL's Waste Mix Facility.

### 03. EXTENSION OF AGREEMENT

(a) If the Generator wishes to send its Hazardous waste suitable for Pre-processing / co-processing after the expiry of the present agreement, it shall give three months advance notice in writing to GGEPI of its desire of extended period of facility and GGEPI shall subject to the available capacity, consider the request and may in its absolute discretion, offer terms for fresh agreement, both the parties hereto shall after reaching an agreement on the offered terms shall execute a fresh agreement at least one month before the date of expiry of this agreement.

(b) The agreement to be terminated with mutual consent in the following eventualities:

(i) On Authorization to GGEPI being canceled, refused, or not granted by RSPCB.

(ii) On expiry of Authorization granted to the Generator and the same having not been renewed by the Generator or of the same having been not granted by MPPCB.

(iii) On expiry of the present Agreement, where no fresh agreement is signed and executed between parties hereto as mentioned above.

(c) Both the parties hereto further agree, in case of the present agreement coming to an end owing to any of the aforesaid eventualities, it will be the sole responsibility of the Generator to manage its Hazardous Waste in accordance with the relevant provisions of law and that GGEPI will not be responsible in any manner whatsoever with respect to Hazardous Waste of the Generator.

(d) Renewal of Registration can be done as per clause 03(a) above after payment of appropriate renewal fees.

### 04. REGISTRATION FEE & MANAGEMENT CHARGES

4.1 The Generator shall have to make the payment of Rs. NIL plus all applicable taxes towards its registration which will not be refundable in any event.

4.2. The registration under this agreement is not transferable in any manner whatsoever except change in name of company or firm without change in management or control.

4.3. The management charges exclusive of all taxes which is presently in force for the type of hazardous wastes suitable to co-processing agreed for sending to GGEPI by Generator is described as follows:

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator



Sr.	Type of wastes	Schedule Name	Physical Status	Calorific Value (cal/gm)	Cl	S	Management Charges (Rs. per MT)
1	ANY PROCESS & DISTILLATION RESIDUE	I 36.1	Solid				9500
2	PROCESS RESIDUES AND WASTE	I 28.1	Solid				9500
3	SPENT CARBON	I 28.3	Solid				9500
4	DATE-EXPIRED PRODUCTS	I 28.5	Solid				9500
5	SPENT SOLVENT	I 28.6	Liquid				9500
6	CHEMICAL SLUDGE FROM WASTE WATER TREATMENT	I 35.3	Solid				9500
7	SPENT ION EXCHANGE RESIN	I 35.2	Solid				9500
8	SPENT CARBON	I 28.3	Solid				9500
9	OFF SPECIFICATION PRODUCTS	I 28.4	Solid				9500

(Attach sheets in case of more types of wastes)

4.4. The Generator shall be liable to pay Goods and Service Tax apart from the above charges.

4.5 The management charges that the Generator shall pay to GGEPI and it shall be subject to change for every financial year after mutual agreement.

4.6 GGEPI has agreed to test & provide Comprehensive Analysis of Hazardous Waste on identified parameters as required for the facility at a cost (Rs. 5,000/- per sample) plus applicable Goods and Service Tax. This payment will be adjusted in the billing.

4.7 The Comprehensive Analysis Report shall determine the acceptance of waste based on the Waste Characteristics & Waste Acceptance Criteria given by the operator of the WMPF.

#### 05. TRANSPORTATION

Sr.	Description	Rate (Rs.)	Unit
1	Transportation Charge	9MT – Rs. 29,700/-	Per Trip
		19 MT – Rs. 58,650/-	
		25 MT – Rs. 72,100/-	
		30 MT – Rs. 80,450/-	
2	Loading Charge	Under IPCA Scope	Per Trip
3	Unloading Charge	Under GGEPI Scope	Per Trip

5.1 As agreed herein above, M/s. GGEPI as part of its obligation under authorization granted by MPPCB or as per Rules to ensure effective handling of hazardous waste shall provide Dumpers/ Tractors / Tankers/ Trucks duly authorized by

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

MPPCB to the Generator for transporting its Hazardous Waste to the authorized facility of GGEPI at the cost of the Generator.

5.2

The above transportation rates are subject to change by mutual agreement by both parties when changes in the cost of fuel charge.

5.3 GGEPI shall provide Dumpers / Tractors / Tankers / Trucks for waste lifting if waste to be transported available with Generator are equal to more than one vehicle capacity. In other circumstances GGEPI shall provide Dumpers / Tractors / Tankers / Trucks for waste lifting once in month. In either case the Generator shall be charged on the capacity of vehicle being provided for waste lifting.

## 06. OBLIGATION OF THE GENERATORS

6.1 While entering into the present agreement with GGEPI, the Generator shall submit all categories of Hazardous Waste they desire to send at WMPF in writing. The said categories of Hazardous Waste shall be as per the parameters specified in the Schedules of the Rules. The Generator shall also give true and correct information related to the quantity, Physical and chemical characteristics, nature, and toxicity of Hazardous Waste Substance.

6.2 The Generator shall get the Authorization from MPPCB permitting the Generator to send its Hazardous Waste to GGEPI and that it shall be the responsibility of the Generator to get the same renewed from time to time.

6.3 The Generator has agreed to declare Hazardous Waste Quantities on annual/monthly basis (as per the Rules) and confirm to a set schedule of waste supply to the GGEPI

6.4 The Generator shall provide basic information of its process/chemicals used along with MSDS, of its each product and hazardous waste generated there from and its characterization to GGEPI or facility operator.

6.5 GENERATOR has to maintain necessary detailed records and to provide details of Hazardous waste as follows:

6.5.1 Provide details of Waste on the storage container as per (Form 08-as per hazardous waste (M, H &T) Rules 2016 and as amended).

6.5.2 Provide details about the Hazardous waste and its characteristics like Explosive/ Ignitable/ Corrosive/ Toxic/ Odor compounds in the Transport Manifest Form (Form 10- as per hazardous and other waste (M,H&T) Rules 2016, and as amended).

6.5.3 TREM card (Form 09- as per hazardous and other waste (M,H&T) Rules 2016 and as amended) to the transporter of hazardous waste.

  
Signed for & on behalf of GGEPI

  
Signed for & on behalf of Generator

6.6 In the event of false information/declaration or withholding information (related to Clause 6) any time during this agreement being in force or until the existence of the facility, all liabilities during Transportation shall remain vested as the responsibility of the GENERATOR.

6.7 The Generator is obliged to intimate 1 week in advance to GGEPI to arrange for Dumpers / Tractors /Tankers/ Trucks and on arrival of the same at the Generator's site, the Generator shall be responsible for loading its Hazardous Waste into the said Dumpers / Tractors /Tankers/ Trucks within 6 (Six) hours or less, as may be notified by GGEPI from time to time, from the said arrival. If the detention of the said Dumpers / Tractor /Tankers/ Trucks at the GENERATOR's site exceeds the notified time, there shall be levied detention charges at the rate mentioned in the Annexure - '1'. The term or rates shall be revised by GGEPI from time to time and intimated to generator in time as per Annexure - '1'.

6.8 The Generator shall give undertaking to GGEPI that the Generator shall take all precautions while packing and loading hazardous wastes in order to ensure that there shall be no leakage or spillage occurs. The Generator shall take all practical steps to ensure that such Waste are properly loaded in the fleet without any adverse impacts on health and environment, which may result from such waste. In the event of such adverse impacts having been caused within the factory premises of the Generator, it shall be the sole liability of the Generator.

6.9 GGEPI shall have the RIGHT TO REJECT the waste and the Generator shall be bound to accept such Hazardous Waste back without any delay and bear all the cost associated with return of hazardous waste rejected by GGEPI, if the same is rejected by GGEPI due to the any of the following reasons:

- The variation in waste characteristics is beyond 5% of the agreed and are found non suitable for WMPF;
- The improper packing and loading of wastes resulted in spillage and leakage;
- The registration has expired with GGEPI;

6.10 The Generator is obliged to maintain waste characteristics as intimated by the GGEPI and/or as specified in the first analysis report (attached as Annexure 1 to this AGREEMENT). The variation beyond 5% will not be accepted by GGEPI. GGEPI is authorized to send it back or is authorized to charge additional charges of such waste resulted due to the change in waste characteristics.

6.11 GGEPI may by a Notice served on the GENERATOR require him to provide such additional information as may be specified in the Notice and the GENERATOR shall send the said information to GGEPI within the relevant and justified time frame, immediately from the receipt of the said Notice.

  
Signed for & on behalf of GGEPI

  
Signed for & on behalf of Generator



6.12 The GENERATOR shall comply with the provision of Environment (Protection) Act, 1986 and the Rules as amended from time to time as also with the condition of the present agreement and that any breach committed thereof shall render the GENERATOR not eligible for disposing of such Hazardous Waste in GGEPI site.

6.13 The GENERATOR shall provide all information related to hazardous waste for Government / Non-Government requirements to GGEPI, as and when required.

6.14 The GENERATOR shall not claim any right, interest or privilege in or in relation / connection with Hazardous Waste accepted at the site of GGEPI

6.15 In case of any change in constitution of firm or company or proprietary concern, Products or quality and/or production rate of products or waste quantity or characteristics, the GENERATOR shall intimate GGEPI by written notification to be given at least 15 days in advance by registered letter prior to proposed date of change.

6.16 In case of any accident, spillage or leakage resulting in environmental degradation; while loading, unloading, transportation or treatment; happening due to the poor quality of wastes packaging or change in quality beyond 5% of the first analysis report, the GENERATOR shall be solely liable for the subsequent legal and financial liabilities, if any.

**07. BILLING AND PAYMENT OF MANAGEMENT CHARGES/ SECURITY DEPOSIT**

7.1 The GENERATOR shall be required to make 100% payment towards the Waste Management charges within 10 Days from the date of Invoice.

7.2 The samples will be drawn and will get tested through waste characterization process. The cost for this purpose shall be borne by the respective GENERATOR only.

7.3 The GENERATOR covenants that the charges for the disposal of its Hazardous Waste as notified by GGEPI shall be subject to revision during the currency of this agreement and as and when the revision is called for; GGEPI shall inform the GENERATOR in advance vide a separate letter.

7.4 GGEPI shall charge the GENERATOR on the basis of weighment to be done at the WMPF site. If the Weigh Bridge at the site is not working, it will be weighed at outside Weight Bridge approved by GGEPI

7.5 The GENERATOR shall be bound by the test result / reports of GGEPI for Waste Management charges and shall not call the same in question for any reason whatsoever.

**08. QUALITY:**

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

8.1 The Generator hereby covenants to see that its Hazardous Waste shall, under all circumstances, Conform to the norms specified by MPPCB and as prescribed under the provisions of law the time being in force.

8.2 The following listed Waste may not be accepted by GGEPI unless expressly specified by GGEPI

- (i) Wastes containing explosive substances
- (ii) Waste which has an obnoxious odor
- (iii) Waste which is flammable (Flash point below 65° C)
- (iv) Waste which contains shock sensitive substances
- (v) Waste which contains volatile substance of significant toxicity
- (vi) Waste which contains cyanide compounds

8.3 GGEPI may reject Hazardous Waste in total, if the GENERATOR'S above mentioned Hazardous Waste is found not to be in consonance with the condition mentioned in the present AGREEMENT and the decision of GGEPI in rejecting the Hazardous Waste of the GENERATOR for non-compliance of the provisions of the present Agreement will be final and it will not be called in question and the GENERATOR shall have to pay the extra amount which shall be charged by GGEPI for expenditure incurred in analyzing, transporting and returning of the rejected such Hazardous waste of the GENERATOR.

#### 09. GGEPI RESPONSIBILITY

10.1 GGEPI has agreed to manage the hazardous waste of Generator as per the applicable laws, and authorization to be granted by MPPCB from time to time.

10.2 GGEPI on receipt of information from Generator will plan and schedule for transport within 3 days of intimation from the Generator.

10.3 GGEPI shall notify a responsible person to receive, authorize unloading and sign the relevant documents like manifests and establish communication with the Generator and with the relevant agencies statutory or otherwise.

#### 10. DEFAULT

11.1 If the Generator fails and/or defaults in the discharge of any of his obligation under the present agreement, the GGEPI may delist the Generator.

10.2 GGEPI reserves its right to accept or refuse Registration. In event of GENERATOR committing any breach / violation of the condition of the present

  
Signed for & on behalf of GGEPI

  
Signed for & on behalf of Generator

agreement or any provision of Law /Act / Rules for the time being in force, GGEPI reserves its right to suspend / cancel the Registration for such period as it deem fit without giving any reason or prior notice.

10.3 Where an offence under the Environment Protection Act or under the Rules framed there under, has been committed by the GENERATOR or is attribute to any negligence on the part of the GENERATOR which shall include its Director, Partner, Proprietor, Manager, Secretary, Officer, Partner, etc. and if such GENERATOR is guilty of the offence or is liable to be prosecuted against and punished accordingly. No suit, prosecution or legal proceeding (s) shall lie against GGEPI for the offence committed by its GENERATOR.

10.4 The suspension / termination shall be revoked only at the sole discretion of GGEPI after it is satisfied that the conditions have been met.

10.5 If the Generator fails and/or defaults in the discharge of any of his obligation under the present agreement, the GGEPI may delist the Generator.

## 11. TRANSFER OF RIGHTS

GGEPI may at any time transfer or assign its rights and obligations under the AGREEMENT to any other company or business concern by giving intimation in writing to the GENERATOR. Upon such transfer or assignment, only the transferee or assignee shall be liable for the obligations herein contained.

## 12. INDEMNITIES

12.1 Generator and GGEPI severally shall at all times comply with all the provisions of the relevant Act and Rules from time to time in force and the Guidelines regarding managing of the said Waste and shall, without prejudice to the generality of the foregoing, also comply with all Environmental Protection Laws, Safety Laws and Regulations from time to time in force and the Rules, Regulations and Notifications made or issued there under from time to time. In the event of GENERATOR and (or) GGEPI committing any breach of the terms of this clause of the Agreement, GENERATOR and GGEPI as the case may be shall indemnify and keep indemnified the Generator / GGEPI of, from and against all claims, payments, costs and actions of whatsoever nature brought against or sustained or incurred by the Generator / GGEPI as the case may be and whether paid for or not arising from or as a result of such breach committed by GENERATOR / GGEPI of the facility in that behalf.

12.2 GENERATOR shall indemnify and keep indemnified GGEPI at all times from and against all actions, suits, proceedings, claims, third party claims, costs, payments and expenses of whatsoever nature made or suffered or incurred by operator of the facility,

  
Signed for & on behalf of GGEPI

  
Signed for & on behalf of Generator



whether by reason of or by virtue of non-performance or non-observance or non-compliance by GENERATOR of any terms and conditions of this Agreement or of the Act, the Rules and the Guidelines.

12.3 GGEP shall at all times comply with all the provisions of the Act and Rules from time to time in force and the Guidelines regarding handling of Waste involving the collection, storage, transportation and delivery thereof, and shall, without prejudice to the generality of the foregoing, also comply with all Environmental Protection Laws, Safety Laws and Regulations from time to time in force and the Rules, Regulations and Notifications made or issued there under from time to time. In the event of GGEP committing any breach of the terms of this clause of the Agreement, GGEP shall indemnify and keep indemnified GENERATOR of from and against all claims, payments, costs and actions of whatsoever nature brought against or sustained or incurred by GENERATOR and whether paid for or not arising from or as a result of such breach committed by the operator of the facility in that behalf.

### 13. FORCE MAJEURE

13.1 In case of any force majeure, GGEP shall not be saddled with any liability contingent or otherwise but in that case, it shall be the sole liability of the GENERATOR.

13.2 Both the parties hereto agree that due to change in any laws related to pollution or due to any directive of any Court or Authority, if GGEP is to incur any additional financial burden consequent upon any alteration and / or modification in the site or because of any other reason, then, in that case the GENERATOR shall be liable to contribute for the same proportion to its disposal of Hazardous Waste quantity in GGEP, Waste Mix Processing Facility.

13.3 In case of any environment risk arising during the performance of this Agreement at the storage site of GGEP either due to force majeure or due to circumstances beyond the control of the parties hereto, the GENERATOR hereby covenants that any liabilities and/or responsibilities which may consequently arise shall be undertaken generally by GGEP

13.4 Both the parties hereto agree that in any event of there being order in form of any injunction, stay, or otherwise from any Court, RSPCB, or any other Authority stopping the functioning of the Site or otherwise whereby GGEP becomes unable to accept Hazardous Waste of the GENERATOR, GGEP shall not be responsible or made responsible and / or be liable in any manner in that regard and that in such an eventuality, it shall be the responsibility of the GENERATOR to get the needful done in respect of disposal of its Hazardous Waste.

  
Signed for & on behalf of GGEP

  
Signed for & on behalf of Generator

13.5 The term FORCE MAJEURE in the CONTRACT means act of God, war, revolt, riot, fire, tempest, flood, earthquake, lightening, direct or indirect consequences of war (declared / undeclared), sabotage, hostilities, national emergencies, civil disturbance, commotion, embargo or any law or promulgation, regulation or ordinance whether Central or State or Municipal, breakage, bursting or freezing or stoppage and / or reduction in quantum of Hazardous Waste to be disposed of at the site. Upon occurrence of such cause and on its termination, the parties rendered unable as aforesaid shall notify the other party in writing within twenty four (24) hours of the beginning and the ending, giving full particulars and satisfactory evidence thereof. Any action of labor employed by the GENERATOR shall not be considered as FORCE MAJEURE.

13.6 Notwithstanding anything else contained herein, neither PARTY hereto shall be liable for damages or to have this AGREEMENT terminated for any delay or default in the performance of such PARTY hereunder if such delay or default in performance derives from conditions beyond the reasonable control of such PARTY, including but not limited to, acts of God, strikes, fires, floods, extreme drought, shortage of supply, riots, work stoppages, embargoes, governmental actions or damage to the plant or facility or any cause unavoidable or beyond the control of either party including any arbitrary ruling by the Government prohibiting the handling of the Waste or continuing domestic or international problems such as wars or insurrections.

13.7 This Agreement shall be deemed to represent the entire Agreement between the parties hereto regarding the subject matter hereof and shall supersede, cancel and replace any and all prior agreements or arrangements, if any, in this behalf, by and between the parties hereto.

13.8 Nothing contained herein shall be deemed to constitute a partnership, joint venture or agency by and between the parties hereto.

13.9 This Agreement may be modified or amended only by writing, duly executed by or on behalf of the parties hereto.

13.10 Any terms and conditions of this Agreement may be waived at any time by the party that is entitled to the benefit thereof. Such waiver must be in writing and must be executed by an authorized officer of such party. A waiver on one occasion will not be deemed to be a waiver of the same or any other breach or non-fulfillment on a future occasion.

13.11 In the event that any provisions of this Agreement is held to be illegal, invalid or unenforceable under any present or future law such provisions shall be deemed terminable and the remaining parts & provisions of this Agreement shall remain in full force & effect.

②

Signed for & on behalf of GGEPI

Signed for & on behalf of Generator

13.12 Either party shall have no right to terminate this agreement and in the event of dispute arising out of and in the course of the pendency of this agreement shall settle the same mutually, within reasonable time frame keeping in view the greater interest of the Organizations i.e. Generator and GGEPI with due allegiance to the applicable legislations and regulations laid down from time to time.

#### 14 PREVIOUS CORRESPONDANCE

14.1 Save and except all discussions and meeting held and correspondence exchanged between GGEPI and the GENERATOR in respect of the AGREEMENT and any decisions arrived at therein in the past and before the coming into force of the present AGREEMENT and no reference of such discussions or the GENERATOR for interpreting the present AGREEMENT or otherwise. Whereas solid waste data sheet and application form, will be treated to be the part of this agreement.

#### 15 ARBITRATION

15.1 In case of any dispute or difference of opinion arising out of the present agreement the matter shall be referred to an Arbitrator mutually agreed upon by the GENERATOR and the GGEPI, whose decision on the issue shall be final and binding on both the parties.

- a) The place of Arbitration will be Chittorgarh.
- b) The cost of Arbitration will be borne by the respective party.

#### 16. LAWS GOVERNING THE AGREEMENT

16.1 The present agreement shall be subject to Indian Laws, rules and regulation and notifications etc. issued under such laws.



Signed for & on behalf of GGEPI


Signed for & on behalf of Generator



## 17. AMENDMENTS

17.1 GGEPI may at any point of time make suitable change in the present Agreement after serving a notice to the said GENERATOR.

## 18. TERMINATION OF AGREEMENT

18.1 This AGREEMENT can be terminated by either party after giving prior written Notice of at least 60 days to the other party. If the cancellation is requested by GENERATOR, the provision relating to minimum charges shall be applicable, also during notice period.

18.2 GGEPI has the unrestricted right to terminate this AGREEMENT and deduct its all pending claims the deposit of the GENERATOR.

## 19. JURISDICTION

19.1 Subject to the provision of Clause - 16 of the present agreement, M/s.GGEPI and the GENERATOR mutually agree that the Civil Court at CHITTORGARH only shall have jurisdiction for all the disputes / differences arising out of this agreement.

19.2 The addresses of the parties hereto unless changed by written notification to be given at least 15 days in advance by registered letter prior to proposed date of change, shall as follows:

a) **M/s Green Gene Enviro Protection and Infrastructure Private Limited**

*[Earlier known as Gujarat Enviro Protection and Infrastructure (D and NH) Pvt. Ltd.]*

Reg. Office: 370, SVP Road, Shop-8, Plot 384, Cigaretwala Buidling, Opp. CBI, PrathanaSamaj, Nr. Harkishndas Hospital, Mumbai-400004, Maharashtra Site: S.No. 2709 to 2712, Village- Singhpur, Nr. Toll Naka, Teh- Kapasan, Dist- Chittorgarh, Rajasthan

b) GENERATOR: **M/S IPCA Laboratories Ltd.**

Address: IPCA Laboratories Ltd-Dewas Plot no 16 to 22, Industrial Area No 1, A.B.ROAD,DEWAS M.P.

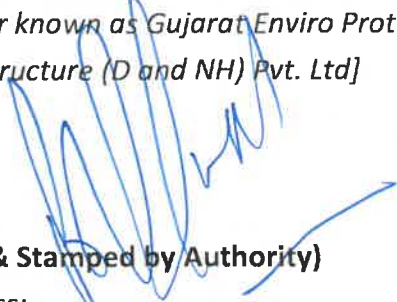
IN WITNESS WHEREOF the parties hereto acting through their properly constituted representatives have set their hands to cause this AGREEMENT signed and executed in their respective names and on their behalf.

  
Signed for & on behalf of GGEPI

  
Signed for & on behalf of Generator

For and on behalf of  
M/s. Green Gene Enviro Protection and  
Infrastructure Private Limited

[Earlier known as Gujarat Enviro Protection and  
Infrastructure (D and NH) Pvt. Ltd]



(Sign & Stamped by Authority)

Witness:

1.....Pathak.....

Name : **Amit Kumar Pathak**  
Designation : Manager CD  
Address : 216, Fortune Ambience Indore.

2.....Wagh.....

Name : **Sourabh Wag**  
Designation : Executive CD  
Address : 216, Fortune Ambience Indore

For and on behalf of GENERATOR  
IPCA Laboratories Ltd. Dewas



(Sign & Stamped by Authority)

Witness:

1.....Sharma.....

Name : **C.S. Sharma**  
Designation : **SR. G.M. OPERATOR**  
Address : **H-32 LIG Indore**

2.....

Name :  
Designation :  
Address



Signed for & on behalf of GGEPI



Signed for & on behalf of Generator

**Annexure-22**

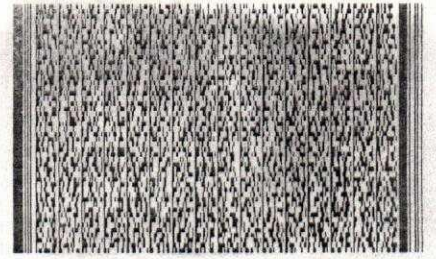
**Hazargo Agreement**

**Copy**





Registration and Stamp Department  
Madhya Pradesh



Certificate of Stamp Duty

E-Stamp Details

E-Stamp Code 01011102072022001487  
Total E-Stamp Amount 500  
Govt. Stamp Duty (Rs.) 500 Municipality Duty (Rs.) 0  
Janpad Duty (Rs.) 0 Upkar Amount (Rs.) 0  
Exempted Amount(Rs.) 0  
E-Stamp Type NON-JUDICIAL  
Issue Date & Time 02/07/2022 12:30:28  
Service Provider or Issuer Details SANDHYA KAUL/SP011743204202100761  
SP/SRO/DRO/HO Details 402/5 Sarvhara Nagar Indore INDORE INDORE

**S. SUNNY KAUL**  
Service Provider  
(M) 9893706302, 9685896009

Deed Details

Deed Type Agreement or Memorandum of an agreement  
Deed Instrument If not otherwise provided for- Five hundred rupees.  
Purpose Agreement

First Party Details

Organization Name HAZARGO INDUSTRIES PRIVATE LIMITED  
Address PLOT NO. 1018,1019, SECTOR -3, INDUSTRIAL AREA, PITHAMPUR, DHAR (M.P.)  
DHAR Madhya Pradesh INDIA  
Number of Persons 1

Second Party Details

Organization Name IPCA LABORATORIES LTD  
Address PLOT NO. 16-22, INDUSTRIAL AREA NO. 1 A.B. ROAD DEWAS (M.P.) DEWAS  
Madhya Pradesh INDIA  
Number of Persons 1

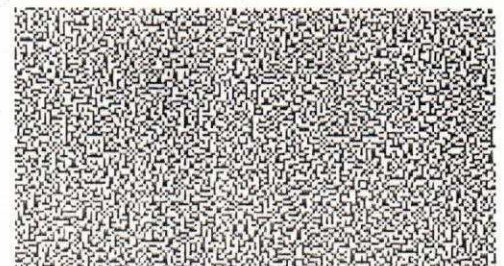
Agreement

*[Handwritten Signature]*

Digitally signed by  
SANDHYA KAUL  
Date: 2022.07.02 12:30:01  
PDT

**HAZARGO INDUSTRIES PVT. LTD.**

*[Handwritten Signature]*  
**Director**  
1-2 JUL 2022





**This Pre-Processing Agreement (hereinafter referred to as the "Agreement"), is made and entered on 2nd day of July 2022**

**By and Between:**

**HAZARGO INDUSTRIES PRIVATE LIMITED.**, a Company incorporated under the provisions of the Companies Act, 1956 having its factory at **Plot no. 1018,1019, Sector - 3, Industrial Area, Pithampur, Dhar, Madhya Pradesh** (hereinafter referred to as "**HAZARGO**", which expression shall, unless repugnant to the context, mean and include its successors and permitted assigns) through its Authorized Signatory **Mr. Atul Khandelwal**, of the One Part.

**And**

**IPCA LABORATORIES LTD**, having its premises at **Plot No.16-22, Industrial Area No.1, A.B. Road Dewas - 455001 Madhya Pradesh** (hereinafter referred to as "**Client**", which expression shall, unless repugnant to the context, mean and include its successors and permitted assigns) (through its Authorized Signatory **Mr. Pawan Kothari**, of the Other Part/Client.

The Client and HAZARGO hereinafter individually referred as 'Party' and collectively as 'Parties'.

- A. WHEREAS, HAZARGO, is engaged in the business of **Pre-processing of Hazardous Waste/Non-Hazardous Waste** located at **1018-19, Sector -III, Pithampur, Madhya Pradesh** and obtained Consent to Operate (CTO), to operate pre-processing facility from Madhya Pradesh Pollution Control Board.
- B. The Other Party (also referred to as "the Client") is engaged in the business activities relating to **manufacturing of API's and intermediate drugs** and is generating Hazardous Liquid/Semi Solid/Solid Waste (hereinafter referred to as "Hazardous Waste")
- C. WHEREAS the Client being desirous of availing the services of collection, transportation, treatment, storage and disposal of Hazardous Waste through pre-processing and, approached HAZARGO for the same.

Signed for & on behalf of HAZARGO

**HAZARGO INDUSTRIES PVT. LTD.**

**Director**

Signed for & on behalf of CLIENT




D. HAZARGO has agreed to accept and manage the Hazardous Waste of the Client on the terms and conditions set out in this agreement read with the provisions of Hazardous Rules and supervision of SPCB.

NOW THEREFORE in consideration of the above-mentioned premises and the mutual promises contained herein, the Client and HAZARGO have agreed to enter into this agreement under the terms and conditions set forth hereinafter

**NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERE TO AS FOLLOWS**

**DEFINITIONS AND INTERPRETATION:**

**Definitions:**

this agreement, the following words, expressions and abbreviations shall have the following meanings, unless the context otherwise requires:

“CPCB” means Central Pollution Control Board.

“Hazardous Rules” means Hazardous Waste (Management, Handling & Trans boundary Movement) Rules, 2016 as amended from time to time.

“MoEF” means Ministry of Environment & Forests.

“SPCB” means Madhya Pradesh Pollution Control Board in the state in which the Pre-processing unit operated by HAZARGO is situated.

**Interpretation:**

In this agreement, unless the subject or context otherwise requires:

- A. Reference to the singular number shall include references to the plural number and vice-versa;
- B. References to a “person” shall include references to natural persons, partnership firms, companies, bodies corporate and associations, whether incorporated or not or any other organization or entity including any governmental or political subdivision, ministry, department or agency thereof.
- C. References to recitals, clauses and schedules / annexure are to recitals, clauses and schedules to this agreement.
- D. Any reference herein to a statutory provision shall include such provision, as is in force for the time being and as from time to time, amended or re-enacted in so far as such amendment or re-enactment is capable of applying to any transactions covered by this agreement.

2

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





E. Clause headings used herein are only for ease of reference and shall not affect the interpretation of this agreement.

F. The Schedules /Annexure shall form an integral part of this agreement.

## **1 SCOPE OF SERVICES**

- 1.1 The scope of services to be provided by HAZARGO under this agreement shall be transportation, treatment, storage and disposal of the waste collected from the premises of the Client located at **Plot No.16-22, Industrial Area No.1, A.B. Road Dewas - 455001 Madhya Pradesh.**
- 1.2 Segregation & Loading of waste will be under the Scope of the Client.
- 1.3 HAZARGO shall dispose the waste as per the mandate of the SPCB read with the provisions of Hazardous Rules.
- 1.4 HAZARGO also agrees to accept even non-hazardous wastes from the Client provided that the concerned SPCB issues 'no objection'.

## **2 GENERAL CONDITIONS**

- 2.1 The Client shall immediately upon execution of this agreement, become registered member of HAZARGO by paying a membership fee of INR **50,000/- plus GST (Life time)** towards its registration which will not be refundable in any event.
- 2.2 The registration under this agreement is not transferable in any manner whatsoever except change in name of the company or firm without change in management or control.
- 2.3 HAZARGO shall plan and schedule for collection of the Waste from the Client and the safety during transportation is the collective responsibility of the Client and the transporter.
- 2.4 The Client shall provide the details of Waste to HAZARGO as mentioned below:
  - i) Complete details of the Waste and its characteristics regarding presence of explosive / ignitable / corrosive / toxic / odorous compounds to the transporter for safe transportation and disposal.
- 2.5 In the event of any false information or withholding information, all the liabilities, whether directly or indirectly arising there from, during transportation, handling, treatment & disposal shall be the responsibility of the client.
- 2.6 The Waste supplied by the Client shall not contain any kind of nuclear/radioactive or any other prohibited material.

3

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





- 2.7 The Client shall provide to HAZARGO, a sample of the Waste and inform the entire process details which leads to generation of such Waste, for the purpose of determining the Waste characteristics and to decide parameters for comprehensive analysis, as well as its final pathway of treatment, storage and disposal of the Waste.
- 2.8 HAZARGO shall carry on the comprehensive analysis of the Waste in its laboratory at the cost of the Client, as per the parameters required for material processing. The comprehensive analysis report shall be used by HAZARGO to determine the disposal pathway based on the waste characteristics & as per MoEF, CPCB and the SPCB rules and guidelines issued from time to time. The disposal pathway shall be mutually agreed between the Client & HAZARGO and shall form basis for disposal/ user charges. HAZARGO has agreed to test and provide Comprehensive Analysis Report of Hazardous Waste on identifies parameters as required for the facility.
- 2.9 Upon receipt of information from the Client, HAZARGO shall plan and schedule for collection of the Waste from the Client and the safety during transportation is the collective responsibility of the Client and the transporter.
- 2.10 HAZARGO shall analyse the Waste received through finger print analysis as per the parameters identified at as prescribed by the concerned SPCB.
- 2.11 In the event there are any differences in the analysis results of comprehensive analysis and finger print analysis, the Client may either accept the results of HAZARGO or send their samples to a mutually agreed third party analysis at their own cost. Any discrepancy in relation thereto shall be informed to the SPCB.
- 2.12 HAZARGO shall have the RIGHT TO REJECT the waste and the Client shall be bound to accept such Hazardous Waste back without any delay and bear all the cost associated with return of hazardous waste rejected by HAZARGO, if the same is rejected by HAZARGO due to the any of the following reasons:
- The variation in waste characteristics is above 5% of the one stated in the lab report.
  - Improper packaging and loading of waste resulted in spillage and leakage
- 2.13 The Client shall provide a fresh comprehensive analysis report when there is a change in the waste characteristics, manufacturing processes, changes in product mix etc. or 2 Years whichever is earlier.
- 2.14 In the event of any false information or withholding information, all the liabilities, whether directly or indirectly arising there from, during transportation, handling, treatment & disposal shall be the responsibility of the Client.
- 2.15 The Client has agreed to declare Hazardous Waste Quantities on annual/monthly basis (as per the rules) and confirm to a set schedule of waste supply to HAZARGO.
- 2.16 CLIENT has to maintain necessary detailed records and to provide details of Hazardous waste as follows:

4

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





2.16.1 Provide details of Waste on the storage container as per (Form 08-as per hazardous waste (M, H &T) Rules 2016 and as amended).

2.16.2 Provide details about the Hazardous waste and its characteristics like Explosive/ Ignitable/ Corrosive/ Toxic/ Odor compounds in the Transport Manifest Form (Form 10- as per hazardous and other waste (M,H&T) Rules 2016, and as amended).

2.16.3 TREM card (Form 09- as per hazardous and other waste (M,H&T) Rules 2016 and as amended) to the transporter of hazardous waste.

2.17 The Client shall provide all information related to hazardous waste for Government / Non-Government requirements to HAZARGO, as and when required.

### **3 USER CHARGES & TERMS OF PAYMENT:**

3.1 This contract is valid for 5 years. The user charges are subject to revision on the basis of government of India wholesale price index and also in every event of escalation of fuel costs, power tariff, change in disposal technologies / method, wage hike etc. However, User charges, disposal charges and Transportation Charges are subject to minimum Annual Revision with mutual discussion with Client.

3.2 Payment terms shall be 10 days. The Client shall be required to pay an amount according to the invoice generated after collection of the hazardous waste from the client for disposal on actual weight. The client is liable to pay the desired amount of invoice within 10 days of receiving the invoice from HAZARGO.

3.3 The waste shall be analysed through fingerprint analysis and the cost shall be borne by the Client

3.4 HAZARGO shall charge the Client on the basis of weigh slip received from the weighbridge facility at HAZARGO site. In case of technical issue arising at the weigh bridge, the material will be weighed outside the weigh bridge facility approved by HAZARGO.

### **4 TERM OF AGREEMENT**

This Agreement shall be valid for 5 years effective from date of agreement, subject to earlier termination by either party in accordance with this agreement.

### **5 EXTENSION OF AGREEMENT**

5

Signed for & on behalf of HAZARGO

**HAZARGO INDUSTRIES PVT. LTD.**

**Director**

Signed for & on behalf of CLIENT





- (a) If the Client wishes to send its Hazardous waste suitable for Pre-processing / co-processing after the expiry of the present agreement, it shall give three months advance notice in writing to HAZARGO of its desire of extended period of facility and HAZARGO shall subject to the available capacity, consider the request and may in its absolute discretion, offer terms for fresh agreement, both the parties hereto shall after reaching an agreement on the offered terms shall execute a fresh agreement at least one month before the date of expiry of this agreement.
- (b) The agreement to be terminated with mutual consent in the following eventualities:
1. On Authorization to HAZARGO being canceled, refused, or not granted by MPPCB.
  2. On expiry of Authorization granted to the Client and the same having not been renewed by the Client or of the same having been not granted by MPPCB.
  3. On expiry of the present Agreement, where no fresh agreement is signed and executed between parties hereto as mentioned above.
- (c) Both the parties hereto further agree, in case of the present agreement coming to an end owing to any of the aforesaid eventualities, it will be the sole responsibility of the Client to manage its Hazardous Waste in accordance with the relevant provisions of law and that HAZARGO will not be responsible in any manner whatsoever with respect to Hazardous Waste of the Client.

## 6 TRANSPORTATION

6.1 As agreed herein above, HAZARGO as part of its obligation under authorization granted by MPPCB or as per Rules to ensure effective handling of hazardous waste shall provide Dumpers/ Tractors / Tankers/ Trucks duly authorized by MPPCB to the Client for transporting its Hazardous Waste to the authorized facility HAZARGO at the cost of the Client.

6.2 Transportation cost per Trip of waste from location of "Client" unit to "HAZARGO" shall be recovered at the following rates;

Sr.	Description	Rate (INR.)	Unit
1	Transportation Charge	16 MT INR 18,000/- Per Trip,	Trip
2	Loading Charge	Under Client Scope	MT or Trip
3	Unloading Charge	Waived off	Trip

The transportation Rate shall be revised based as& when changes in the cost of fuel charge. These rates will be subject to revision only when the difference in the fuel rates exceeds by 10% as per current rate i.e. 93.95/ltr.

6

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





## Loading Time & Detention Charges

SN	Vehicle Capacity	Free Loading Time	Detention Charges/ hr
(i)	6 to 9 tonnes	6 hrs	Rs. 500/- Per Hour
(ii)	10 to 20 tonnes	6 hrs	Rs. 500/- Per Hour
(iii)	20 to 30 tonnes	6 hrs	Rs. 500/- Per Hour

6.3 HAZARGO shall provide Dumpers / Tractors / Tankers / Trucks for waste lifting if waste to be transported available with Client are equal to more than one vehicle capacity. In other circumstances HAZARGO shall provide Dumpers / Tractors / Tankers / Trucks for waste lifting once in month. In either case the Client shall be charged on the capacity of vehicle being provided for waste lifting.

6.4 The Client is obliged to intimate 1 week in advance to HAZARGO to arrange for Dumpers / Tractors / Tankers / Trucks and on arrival of the same at the Client's site, the Client shall be responsible for loading its Hazardous Waste into the said Dumpers / Tractors / Tankers / Trucks within 3 (three) hours or less, as may be notified by HAZARGO from time to time, from the said arrival. If the detention of the said Dumpers / Tractor / Tankers / Trucks at the Client's site exceeds the notified time, there shall be levied detention charges at the rate mentioned in the Annexure - '1'. The term or rates shall be revised by HAZARGO from time to time and intimated to Client in time as per Annexure - '1'.

## 7 NON-ACCEPTABLE MATERIAL

The following listed wastes shall not be accepted by HAZARGO unless expressly specified by HAZARGO:

- Wastes containing explosive substances
- Waste which has an obnoxious odor
- Waste which is flammable (Flash point below 65° C)
- Waste which contains shock sensitive substances
- Waste which contains volatile substance of significant toxicity
- Waste which contains cyanide compounds

## 8 FORCE MAJEURE

Notwithstanding anything else contained herein, neither Party hereto shall be liable for damages or to have this agreement terminated for any delay or default in the performance of such Party hereunder if such delay or default in performance derives from conditions beyond the reasonable control of such Party, including but not limited to, acts of god, strikes, fires, floods, extreme drought, shortage of supply, riots, work stoppages, embargoes, governmental actions or damage to the plant or facility or any cause unavoidable or beyond the control of either party including any arbitrary ruling by the Government prohibiting the handling of the Waste or continuing domestic or international problems such as wars or insurrections.

7

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





## 9 INDEMNITY

The Client do hereby indemnify, keep indemnified and hold harmless the HAZARGO, its representatives, nominees and officers (including without limitation, reimbursement of any loss suffered by HAZARGO and / or its officers, directors, employees, agents or affiliates and their legal costs), awards, damages, losses and / or expenses, either pecuniary or non-pecuniary in nature, arising directly or indirectly, whether during collection or transportation or treatment or storage or disposal, as a result of:

- a) the Waste supplied by or collected from the Client in case of any mismatch of waste from Trem Card; and any non-disclosure or wrong disclosure of any information as to the characteristic of waste, or
- b) any civil or criminal proceedings or liability under any law for any unlawful dumping of untreated wastes by the Client either at the project site of HAZARGO or anywhere else
- c) any violation or non-compliance by the Client of the provisions of Hazardous Waste (M H & TBM) Rules 2016, Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 including any modifications, amendments made thereto and any new acts and rules legislated and promulgated governing the activity under this Agreement during the term of this Agreement or any extension thereof.

## 10 EVENTS OF DEFAULT

The following shall constitute Client events of default:

- a. If the Client fails / refuses to pay its bills / dues for the user charges payable under this Agreement.
- b. If the Client fails / refuses to pay within the time stipulated the advance amounts and deposits etc. called upon to do so by HAZARGO.
- c. If the Waste supplied by the Client contains any radioactive or prohibited material.
- d. If the Client commits gross violation of the terms of this agreement.

## 11 TERMINATION

- 11.1 The Operator shall have the right to terminate this Agreement without giving any notice, immediately upon occurrence of the client's event of default.

8

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





11.2 Either party shall have the right to terminate this Agreement in the event of violation of any of the terms and conditions as agreed upon in this agreement or otherwise, upon giving 3 month's written notice to the other party.

## 12 ENTIRE AGREEMENT

This Agreement shall be deemed to represent the entire Agreement between the parties hereto regarding the subject matter hereof and shall supersede, cancel and replace any and all prior agreements or arrangements, if any, in this behalf, by and between the parties hereto.

## 13 DISPUTE RESOLUTION

Any dispute arising out of this agreement and the contents, hereto between the Client and HAZARGO shall be referred to Arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The arbitration proceedings shall be conducted in English/Hindi and the Arbitration shall take place at Indore. The arbitral award shall be final and binding upon both the parties.

## 14 APPLICABLE LAW

HAZARGO and the Client mutually agree that the courts of law at Indore shall have jurisdiction over all the disputes arising out of this Agreement.

## 15 JURISDICTION

15.1 Subject to the provision of Clause - 10 of the present agreement, **M/s. HAZARGO** and the Client mutually agree that the Civil Court at INDORE only shall have jurisdiction for all the disputes / differences arising out of this agreement.

15.2 The addresses of the parties hereto unless changed by written notification to be given at least 15 days in advance by registered letter prior to proposed date of change, shall as follows:

### **M/s HAZARGO INDUSTRIES PRIVATE LIMITED**

Site: Plot no. 1018-19, Sector -III, Pithampur, Madhya Pradesh

### **CLIENT: M/s IPCA LABORATORIES LTD**

Address: Plot No.16-22, Industrial Area No.1, A.B. Road Dewas - 455001 Madhya Pradesh

IN WITNESS WHEREOF the parties hereto acting through their properly constituted representatives have set their hands to cause this AGREEMENT signed and executed in their respective names and on their behalf.

Signed for & on behalf of HAZARGO

**HAZARGO INDUSTRIES PVT. LTD.**

Director

Signed for & on behalf of CLIENT





For and on behalf of  
Hazargo Industries Private Limited

HAZARGO INDUSTRIES PVT. LTD.

Director

(Sign & Stamped by Authority)

Witness:

1.....

Name: Sourabh Wagh  
Designation: Manager BD  
Address: Indore

2.....

Name: Deepak Holkar  
Designation: Accountant  
Address: Indore

For and on behalf of  
Ipca Laboratories Ltd



(Sign & Stamped by Authority)

(Pawan Kothari)  
(V.P. Comm.)

Witness:

1.....

Name: Chandrasekhar Nallal  
Designation: Sr. Gen. Operations  
Address: Ipca Lab Ltd, Dewas

2.....

Name: Tarun Kumar Bora  
Designation: DRM Comm.  
Address: Ipca Lab Ltd, Dewas

Signed for & on behalf of HAZARGO

HAZARGO INDUSTRIES PVT. LTD.

Director

Signed for & on behalf of CLIENT





**Annexure -1**

**Quotation for Pre-processing of Hazardous/Non Hazardous waste.**

S.No.	Particulars	Disposal Charges
1	Spent solvent	INR 8,000 /MT
2	Date expired product	INR 8,000 /MT
3	Process residue and waste	INR 8,000 /MT
4	Chemical sludge from waste water treatment	INR 8,000 /MT
5	Off specification product	INR 8,000 /MT
6	Spent Carbon	INR 8,000 /MT
7	Spent Ion exchange resin containing toxic metals	INR 8,000 /MT
8	Any Process or Distillation residue	INR 8,000 /MT
9	Contaminated cotton rags and other cleaning material	INR 8,000 /MT
10	Spent Carbon or Filter Medium	INR 8,000 /MT

**Note:**

- Rates are exclusive of all taxes & duties.
- Freight charges: INR 18,000/- for 16 tonnes vehicle capacity,
- The vehicle shall be loaded within 6 hours, detention charges above 6 hours is INR500/hour.
- Material with Chloride above 10% will not be accepted. ✓
- Also material having ph level below 2.5 and above 12 will not be accepted. ✓
- The membership fee is INR 50,000/- plus GST (Life Time)
- Payment terms:10 Days
- Loading: Under Client's Scope

11

Signed for & on behalf of HAZARGO

**HAZARGO INDUSTRIES PVT. LTD.**

**Director**

Signed for & on behalf of CLIENT



# **Annexure-23**

**KGN Traders**



July 25, 2022

To,  
Mr. A K Jain  
Mumbai

From  
IPCA Dewas

Through: Mr. Ravi Jain

Sub:- Scrap & Coal Ash Agreement

Dear Sir,

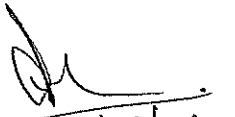
We are enclosing herewith Scrap agreement for the period from 15<sup>st</sup> July'22 to 31<sup>st</sup> Mar'23

1) M/s. KGN Traders (Dewas) – Scrap agreement

Kindly do the needful

Regards,

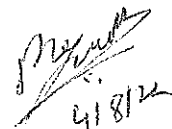
Mr. Tarun Barot

  
26/07/22

⊗ Rates & Vendor finalised by I.A. Teer.

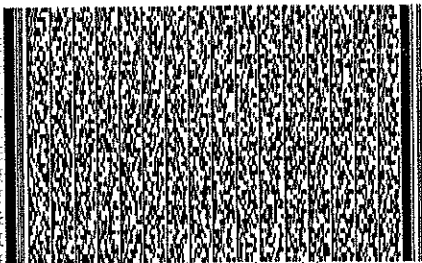
\* Vendor identified through E-Auction mode for Reclamation location.  
as per MPCB consent Drum required to be sale in Hazardous category.

\* MPCB consent Approved by EHS Departments

  
4/8/22



# Registration and Stamp Department Madhya Pradesh



## Certificate of Stamp Duty

### E-Stamp Details

E-Stamp Code: 01011706042022000720  
 Total E-Stamp Amount: 500  
 Govt. Stamp Duty (Rs.): 500  
 Janpad Duty (Rs.): 0  
 Exempted Amount (Rs.): 0  
 E-Stamp Type: NON-JUDICIAL  
 Issue Date & Time: 06/04/2022 10:58:53  
 Service Provider or Issuer Details: MUKESH MAHAJAN/SP011743009201800039  
 SP/SRO/DRO/HO Details: 52, BOHRA BAKHAL, NEAR MAROTHYA BAZAAR, INDORE (M.P.) MOBILE No. 9827599216 INDORE INDORE

### Deed Details

Deed Type: Bond  
 Deed Instrument: Bond, not being a debenture and not being otherwise provided for by this Act or by the Court Fee Act, 1870 (7 of 1870). (a) 0.5 percent of the amount or value, secured subject to a minimum of five hundred rupees. (b) Where no valuation is possible, five hundred rupees.  
 Purpose: BOND

### First Party Details

Organization Name: IPCA LABORATORIES LIMITED  
 Address: 89 A-B/90/91 POLOGROUND, INDORE INDORE Madhya Pradesh INDIA  
 Number of Persons: 1

### Second Party Details

Organization Name: NA  
 Address: NA INDORE Madhya Pradesh INDIA  
 Number of Persons: 0

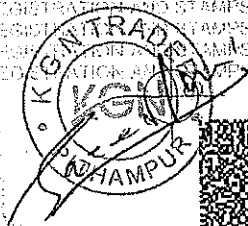
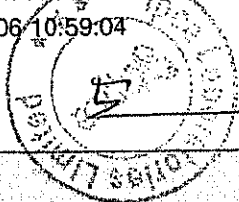
### AGREEMENT

This AGREEMENT made on 25<sup>th</sup> July 2022 between M/s IpcA Laboratories Limited (Add- Plot no 16 to 22 industrial area no1 , A.B road Dewas - 455001 ) a Company registered under the companies Act, 1913 and having its registered Office at 48 Kandivali (W), Mumbai- 400067 (which shall unless repugnant to the context or to the meaning there of deemed to include their successors and assigns) of the ONE PART, herein after referred as "Company" in agreement

AND

Mr. Khan Rashid Ahmed Akabrali, Proprietor of M/s KGN TRADERS (PAN-AJWPK3594N) hereinafter called Contractor and having the contractor's place of business at Plot No 520-B, Sec-3, Pithampur, Dist. Dhar (MP) Pin -454775 (which expression shall unless repugnant to the context or to the meaning thereof be deemed to include their heirs, executors, administrators and assigns) of the OTHER PART.

Digitally signed by MUKESH MAHAJAN  
 Date: 2022.04.06 10:59:04  
 IST





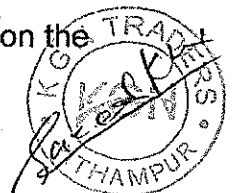
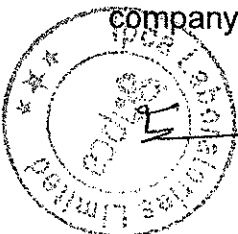
WHEREAS the Contractor has approached the Company and expressed that the Contractor having expertise in carrying out entire services related to Non Hazardous scrap items & Empty containers collection and disposal and other incidental and related jobs. More over they have valid consent from the Pollution Control Board for collection and recycling of Non Hazardous scrap items & Empty containers so collected.

And whereas the company is engaged in the business of manufacturing of pharmaceuticals and they require strict hygienic condition and compliance of all the environmental regulations to run its manufacturing operations in an environment friendly and efficient manner, which requirement shall be fulfilled by the contractor. The company has offered terms and condition to the contractor and the contractor has accepted the contract for collection and disposal of Non Hazardous scrap items & Empty containers is generated by the Company in the course of its manufacturing operations on principal to principal basis and on the terms and condition hereinafter appearing.

**NOW THE AGREEMENT WITNESSETH AS FOLLOWS:**

It is hereby agreed by and between the parties as under:-

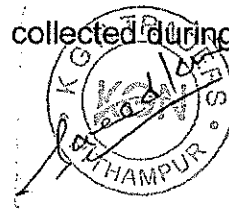
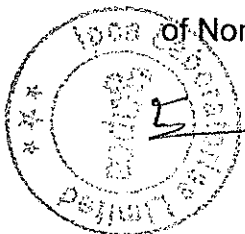
1. Rates for collection of Non Hazardous scrap items / Empty containers & Non Hazardous Metal scrap are as per enclosed **Annexure "A"**.
2. The above rates are exclusive of GST & TCS and any other taxes as applicable from time to time.
3. Quantity discount will be given on highly wet condition scrap material during rainy season( approved by Unit Head/ Commercial Head)
4. Contractor should lift all Non Hazardous scrap items / Empty containers / Non Hazardous kachra scrap & Non Hazardous Metal scrap compulsorily on each working day. In case, contractor fails to collect material on daily basis, company shall be free to raise penalty @ Rs. 5,000/- per day basis on the



contractor for any non- compliance / audit remarks on the company. In such case company shall have right to give material to another vendors.

5. Contractor has to collect Non Hazardous scrap items & Empty containers from designated points within the Company's plant premises and ensure to maintain such designated places "Clean and Hygienic" at all times during the course of the collection of Non Hazardous scrap items & Empty containers ..
6. For the purpose of handling the Non Hazardous scrap items & Empty containers , the Contractor has to arrange required truck/tractor or any suitable vehicle along with sufficient man power for collecting and sorting of the Non Hazardous scrap items & Empty containers from the designated place .
7. Contractor shall ensure that labels on liquid bottles are removed and bottle caps are punctured / DE-shaped before dispatched from company premises.
8. For doing the said jobs, the contractor shall also ensure that their workmen deputed to the company premises for collection of the Non Hazardous scrap items & Empty containers and while on such work, are well disciplined and are properly behaved and have not consumed any intoxicating drinks, drugs ,tobacco(in any form); etc. while they are in the Company premises.
9. Before deploying man power for the above job, contractor has to provide necessary documents such as Id proof/Voter ID /PAN card or any document which proves identity of the person to the Company's security department before allowing such personnel inside the Company's factory premises.
10. The Contractor has to ensure while filling of the truck/tempo that materials are segregated and clubbed according to the category as defined in the Non Hazardous scrap items & Empty containers rate contract. If any discrepancy is found during random checking, a penalty to the extent of 10 times the cost

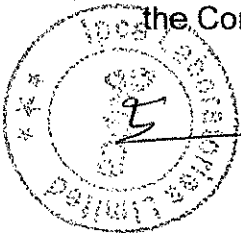
of Non Hazardous scrap items & Empty containers collected during such



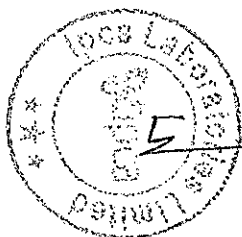


discrepancy will be imposed (based on management discretion) on the contractor.

11. Necessary ESIC/ PF and insurance policy under workman compensation act 1923 for workmen compensation for the persons working inside the Company's factory premises for above contract work is to be taken by the contractor.
12. The Invoice will be raised by the Company on consignment basis, and the payment of the same will be paid by the contractor in advance. Contractor shall also Provide 3 blank "Crossed / Account payee" Cheque in favor of "Ipcal Laboratories Limited", which will be used by the company as security against any default of payment against contractor's outstanding.
13. Contractor has deposited Rs 1,00,000/- ( One Lakh only) towards interest free security deposit to the company for the entire period till the contract is in force. The said security deposit shall be refunded to the contractor on completion or termination of the agreement. In case any outstanding is lying in contractor's account the same shall be deducted from the security deposit.
14. Contractor shall be responsible to dispose of all the materials collected from the factory premises, at appropriate place with all safeguards and necessary environment compliance / statutory laws applicable / in force from time to time. Disposal of Non Hazardous scrap items & Empty containers item collected by the contractor shall be done as per "**Annexure B**"
15. Contractor is required to comply all the statutory laws and guidelines issued by the respective authorities such as (Environment ministry, Madhya Pradesh pollution control board, Local municipality, GST law etc.) with regards to the collection, disposal, handling, subsequent usage, etc. of the Non Hazardous scrap items & Empty containers collected under this contract. Contractor has to provide consent copy under Madhya Pradesh pollution control board to the Company.



16. Responsibility of company on the Non Hazardous scrap items & Empty containers collected by the contractor ceases, the moment Non Hazardous scrap items & Empty containers leaves the Company's factory premises.
17. Contractor undertakes to be completely responsible for all the materials being collected from company's factory premises within and outside company premises under his possession. Contractor also undertakes to be completely responsible, once any material is removed outside the company premises.
18. In acceptance of this agreement, the contractor covenants and agrees to comply in all respects with appropriate laws of the State and country.
19. In case the contractor fails to follow any obligation as enumerated any of the above mentioned points The Company can discontinue the contract without any notice period /any written communication.
20. Contractor shall ensure that all the Non Hazardous scrap items & Empty containers is adequately decontaminate before recycling, so that it will not jeopardize safety of the end user.
21. Contractor is required to provide immediate information to the company on any untoward incidence happens to its vehicle, Non Hazardous scrap items & Empty containers while transporting or at his premises, if it is related with Company Non Hazardous scrap items & Empty containers .
22. Contractor premises shall be subjected to audit by the company officials.
23. The Company shall not be responsible for any consequences arising out of negligence on the part of the Contractor or his workmen during the course of their work under this contract. The contractor alone shall be responsible for non compliance's of applicable laws and Rules in relation to the Non Hazardous scrap items & Empty containers collected under this contract once





the collected Non Hazardous scrap items & Empty containers leaves Company premises.

24. Company can give Notice period for 15 days for terminating the above agreement.

The contract is valid for nine month from 15<sup>th</sup> 'July'2022 to 31<sup>st</sup>March'2023 for company plant situated at Plot No. 16 to 22, Industrial area No. 1, A.B. Road, Dewas, Madhya Pradesh – 455 001 and thereafter it will come to an end by efflux of time unless it is renewed in writing by the parties.

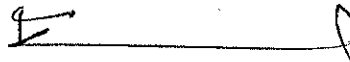
IN WITNESS WHEREOF THE PARTIES HERETO HAVE HEREUNTO SET AND SUBSCRIBED THEIR HANDS AND SEALS THE DAY AND YEAR ABOVE WRITTEN. SIGNED, SEALED AND DELIVERED)

By the within named in the Presence of Mr.

1. \_\_\_\_\_

2. \_\_\_\_\_

For Ipca Laboratories Ltd.



A. K. JAIN  
Joint Managing Director



SIGNED, SEALED AND DELIVERY

By the within named in the Presence of Mr.

1. \_\_\_\_\_

2. \_\_\_\_\_



**Annexure - "A"**

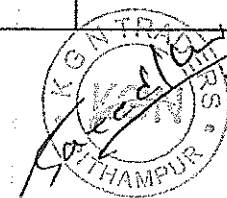
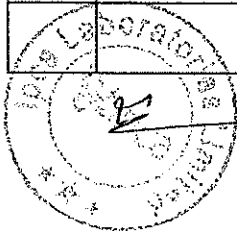
**Ipca Laboratories Limited - Dewas Plant**

**Rates For Empty Container & Closure - Hazardous & Non Hazardous Items**

**Period 15/07/2022 to 31/03/2023**

**General Scrap Items - Dewas (KGN Traders)**

Sr No	Particulars	UOM	Hazardous Rate (Excluding GST & TCS)	Non-Hazardous Rate (Excluding GST & TCS)
1	HDPE/Plastics/PVC Drums & Carboy (Including broken drums) - All color - Drum capacity 5 liter to 200 Liter	Kg	66	70
2	Polythene Mix (Light & heavy) All color	Kg	40	48
3	MS & GI Drums (Including broken drums) Drum capacity 5 Liter to 200 Liter (Including Paint drums)	Kg	25	30
4	HDPE Pipe, HDPE Bags & Plastics Scrap	Kg	<b>Non - Hazardous category</b>	25
5	Wooden & Ply mix	Kg		5
6	Broken Glass & Glass Bottles	Kg		4
7	Fiber drums with/without ring & LID , waste paper mix & corrugated boxes	Kg		14

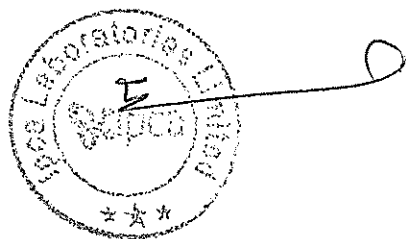




8	Rubber Pipes	Kg	1
9	Ground disposal (Glass wool, Rock wool, spunch & other than non-identifiable material)	Kg	NIL
10	HDPE Pallets	Kg	35

**Ipca Laboratories Limited - Dewas Plant**  
**Rates For Empty Container & Closure - Hazardous & Non Hazardous Items**  
**Period 15/07/2022 to 31/03/2023**

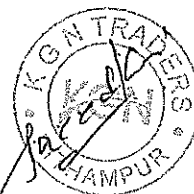
<b>Metallic Scrap Items - Dewas</b>			
<b>Sr No</b>	<b>Particulars</b>	<b>UOM</b>	<b>Rate (Excluding GST &amp; TCS)</b>
1	MS Light/Heavy	Kg	35
2	GI Ducting	Kg	28
3	Aluminum Scrap	Kg	120
4	Copper	Kg	500
5	Brass	Kg	300
6	Electrical cables	Kg	45
7	Electrical Motors	Kg	62
8	Aluminum filter	Kg	45
9	GI filter	Kg	18



## Annexure - "B"

Disposal way of different kind of scrap.

SR. NO.	ITEM NAME	Disposal Procedure
	<b>FOIL</b>	
1	BLISTER CUTTING / PVC CUTTING ,ALU ALU FOIL,ALUMINIUM FOIL.	Melt and than Recycle.
	<b>DRUMS</b>	
2	DRUMS- M.S,IRON,INDONE ,TIN , ALLUMINIUM.	Clean with disinfectantaCrushaMelt and Recycle
3	PLASTIC, PVC,HDPE DRUMS.	Melt a Recycle for granule
	<b>CARBOYS</b>	
4	PVC / PLASTIC CARBOYS.	Melt a Recycle for granule
	<b>POLYTHENE / PVC</b>	
5	POLYTHENE / PLASTIC /PVC SCRAP.	Melt a Recycle for granule
	<b>OTHERS</b>	
6	WASTE PAPER.	Crushed a Paper pulp industry
7	CORRUGATED BOX.	Crushed a Paper pulp industry
	<b>METAL SCRAP</b>	
8	ALUMINIUM SCRAP.	Recycle
9	ELECTRICAL WIRE SCRAP.	Recycle
10	M.S./S.S. / IRON/COPPER SCRAP.	Recycle





## Annexure-24

### Hazardous Chemical Storage Tanks (Above Ground)



### Hazardous Chemical Storage Tanks (Under Ground)



## Annexure-25



**Dyke wall of Chemical Storage Tank**



Annexure-26  
Spill Control Kit





**Annexure-27**  
**Spill Control Pallet**

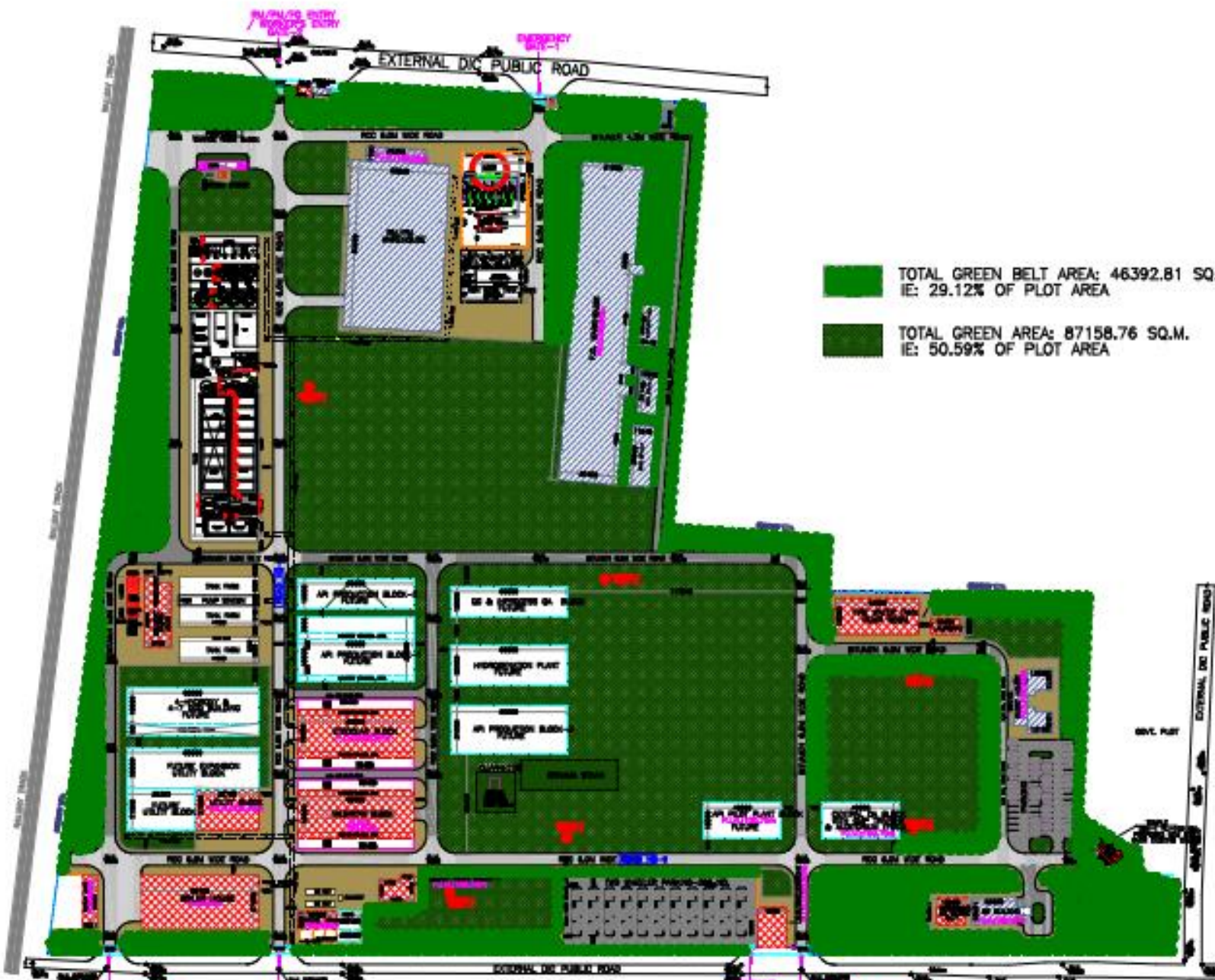


# **Annexure-28**

## **Green Belt**

## **Layout Plan**





TOTAL GREEN BELT AREA: 46392.81 SQ.M.  
 IE: 29.12% OF PLOT AREA

TOTAL GREEN AREA: 87158.76 SQ.M.  
 IE: 50.59% OF PLOT AREA

**NOTES :**

1. ALL DIMENSIONS AND SIZES ARE INDICATED IN METRIC UNITS UNLESS OTHERWISE SPECIFIED.
2. THE CALCULATION SHALL BE DONE AFTER FINALIZATION OF PRODUCTION BLOCKS.



- PRESENT STRUCTURES
- PRESENT BLOCKS
- EXISTING BLOCKS
- FUTURE BLOCKS

**ABBREVIATIONS**

R.LVL :	ROAD LEVEL
P.LVL :	BUILDING PLINTH LEVEL
N :	NORTHING (COORDINATE IN M.)
E :	EASTING (COORDINATE IN M.)
LL :	INVERT LEVEL

NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR PERMITTING	15/05/2024	...	...
2	...	...	...	...
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49	...	...	...	...
50	...	...	...	...

REFERENCE DRAWING:

M/S. IPCA LABORATORIES LTD.

PROJECT LOCATION: PLOT NO 16-22 INDUSTRIAL AREA NO. 1 BARBAD DEMS.

PRODUCT CONSULTANT: Dashi Consultants (P) Ltd.

PREPARED FOR: EXECUTION

PROJECT TITLE: API PROJECT

DRAWING TITLE: MASTER SITE PLAN WITH WEST SIDE ROAD COORDINATES

MASTER SITE PLAN

A  
G



**Annexure-29**

**Green Belt Area**





## Annexure-30

RCC Road Diverted to Save Peepal Tree



Storm Water Channel  
Diversion to save Ashok Tree



Tank Farm Area Changed to  
Save Ber Tree



Hydrant Line Diversion  
to save Neem Tree





**Annexure-31**

**OSEP Approval**  
**Receipt**



**DIRECTORATE, INDUSTRIAL HEALTH AND SAFTY, M.P. INDORE**  
518, New Moti Bunglow, M.G. Road, Indore-452007  
Phone No. 0731-2533482, Fax- 0731-2544264, E-mail- dihsindore@gmail.com,  
dihsindore@mp.gov.in (MAJOR ACCIDENT HAZARD CONTROL CELL)

**OSEP NO : RE15072112122640**

**Category : Under Section 2CCB**

To,

The Occupier,

Ipcalaboratories Ltd. (FAC2122640),

16A, 16B, 17A, 17B, 18A, 18B, 19A, 19B, 20A, 20B, 20C, 21A, 21B, 21C and 22,

Industrial Area No 1,

Pincode : ,

Dist.: Dewas (M.P.)



**Sub:-** On-Site Emergency Plan.

**Ref:-** Your documents duly verified by the occupier & on the subject Dated **01/06/2022**

Please be informed that documents in which the Occupier have disclosed the information related to hazard at his installation in compliance of the Section 41-B of the Factories Act, 1948 and which also described his On-site Emergency Plan, (after supplementing certain modifications by the MAHC Cell distinctively marked on the plan) is hereby **Notified Final** with the following stipulations for the period from **15/06/2022** to **14/06/2024** :-

1. That in case any relevant information as required under the Section 41-B of the Factories Act, 1948, if has not been disclosed this notification does not provide any exemption in this regard and the occupier his-self is liable for concealing the information;
2. That the document will be subjected for review :-
  - a) Generally after a period of two years from the date of issue of this letter;  
or
  - b) During any intervening period of two years if it is instructed to do so by this cell;  
or
  - c) Invariably, where any change in the plant, machinery, building, structure, substance, storage or the manufacturing process/ operations is intended by the occupier or his factory persons;
3. That the documents will have to be reviewed (as above) always in consultation with this cell and it will be occupier's liability to provide reasonable time for review and get notified final or further period.
4. The suitable Training/ Mock drills/ Exercises be arranged at the factory to make all concerned familiar with their duties/ responsibilities as outlined in the on-site emergency plan and be well trained to act accordingly at any emergency and save life as well as the property.





**DIRECTORATE, INDUSTRIAL HEALTH AND SAFTY, M.P. INDORE**  
**518, New Moti Bunglow, M.G. Road, Indore-452007**  
**Phone No. 0731-2533482, Fax- 0731-2544264, E-mail- dihsindore@gmail.com**  
**(MAJOR ACCIDENT HAZARD CONTROL CELL)**

5. That report/ observations of mock drills/ rehearsal or action at any emergency situation that might have arisen, shall be furnished by the factory management to this cell to asses efficiency of the plan.
6. The necessary copies of this plan or part thereof be got multiplied by the factory management and provided to all concerning statutory authorities and other persons and also placed at designated emergency control center in an accessible place to all concerned in the factory.
7. That in case of failure to comply with the stipulations or the relevant provisions of the laws, not withstanding legal proceedings to which the occupier may be subjected he or his-self will bear (for any suspension/ refusal/ rejection of his license to work the factory) the liability of such action.

**Condition :-** (1) Sufficient fire fighting facilities shall be maintained in the factory as per Rule 72 of M.P. Factories Rules 1962. (2) All the preventive measures shall be ensured in the factory regarding storage and handling of all hazardous materials as mentioned in its MSDS uploaded with the plan.

**ENCLOSED:-Copy of on site emergency plan**

Indore  
Dated : 15/06/2022

**Director,**  
**Chiff Inspector of Factories**  
**Industrial Health and Safety,**  
**Govt. of Madhya Pradesh, Indore**

Digitally Signed By SHIRISH GOPALRAO  
WADIKAR (INDORE)  
Date : 13-Sep-2022 12:15:13 IST



This is a digitally signed online verifiable document and does not need manual signature.

# **Annexure-32**

## **Off site Disaster** **Management** **Plan-Dewas**



# District Disaster Management Plan [DDMP] Template

For School of Good Governance & Policy Analysis,  
Government of Madhya Pradesh, Bhopal

Prepared by



*SEEDS  
15a,  
Sector  
New Delhi*

*Technical  
Institutional  
4,*

*Services,  
Area,  
R.K.Puram,*

## ACKNOWLEDGMENT

The project assigned to us was not only prestigious but was also laden with responsibility. This project required a lot of dedication and patience and it was the School of Good Governance and Policy Analysis that gave us an opportunity to gain this invaluable experience.

No work can be done single handed and there are many people behind the project.

Constant technical support from Mr. Amit Tuteja was very invaluable when I was working on the project. The suggestions by Miss. Shivangi Chavda and Mr. Sunish Jose were very helpful. On the whole, SEEDS Technical support was the guiding torch throughout.

The SGGPA administration comprising of Mr. Akhilesh Argal and Mr. Haider Rizvi has always propelled my confidence with their words of encouragement.

It will be wrong on my part if I do not mention the enormous help received from the district administration of Dewas. I thank Mr. Mukesh Chand Gupta , the honorable collector of district Dewas for sparing his valuable time to the plan and Mr. Rajesh Jain, the commandant of district Dewas for his constant support and guidance throughout my stay at Dewas. My heartfelt thanks also go to all the people in the various line departments who have helped me for the data collection.

I am grateful to Mr. Dilip Kumar Singh, DMI Bhopal for helping me with his professional expertise.

Last but not the least, special thanks to Mr. Gaurav Khare, our project officer, who rendered his pleasant as well as crucial support all throughout my project.

Madhuri Swamy

Intern SGGPA

XIMB

## TABLE OF CONTENTS OF DISTRICT DISASTER MANAGEMENT PLAN

### A . GENERAL

8

#### 1. Overview 8

1.1 District Profile	8
1.1.1 Location and Administrative divisions	8
1.1.2 Geography and Topography	9
1.1.3 Demography and Socio Economics	10
1.1.4 Climate and Weather	10
1.1.5 Health (Medical)	11
1.1.6 Education	12
1.1.7 Agriculture and Land use	14
1.1.8 Housing patterns	15
1.1.9 Industrial set ups	15
1.1.10 Transport and Communication Network	16
1.1.11 Power stations and Electricity installations	16
1.1.12 Major historical, religious places, tourist spots	17
1.2 Scope and Ownership of District Disaster Management Plan	17
1.2.1 Authority of the Plan	17
1.2.2 Responsibility & Accountability of the Plan	17
1.3 Purpose of the Plan	18
1.4 Objectives	18
1.5 Approach	18

#### 2. Institutional Arrangements 18

2.1 District Disaster Management Authority	18
2.2 District Disaster Management Committee	18
2.3 District Emergency Operations Center	19
2.4 District Disaster Information Management System	19
2.5 Urban Area Disaster Management Committee	19
2.6 Block Level Disaster Management Committee	20
2.7 Gram Panchayat / Village Disaster Management Committee	20

### B. HAZARD, VULENRABILITY, CAPACITY ASSESSMENT AND RISK PROFILING

21



1. Hazards Assessment	21
1.1 History of past disasters	21
1.2 Major applicable hazards	22
1.3 Seasonality of hazards	22
2. Vulnerability Analysis – [ Physical , Social , Economic ,Natural and Institutional ]	22
3. Capacity Analysis - [Physical , Social , Economic , Institutional, Natural, Resources]	23
4. Risk Analysis	24
4.1 Potential Impacts of applicable hazards and existing vulnerabilities	24
4.2 Risk Profiling of the district	25

## **C. DISTRICT LEVEL DISASTER MANAGEMENT PLANNING**

### **26**

1. District Action Plans	26
1.1 Risk Mitigation Plan	26
1.1.1 Scope of Integrating Risk Reduction in Development Schemes	26
1.1.2 Training & Capacity Building	27
1.1.3 Community Initiatives	27
1.1.4 Risk Management Funding	28
1.2 Preparedness Plan	28
1.2.1 Preparedness before response	28
1.2.2 Pre-disaster Warning, Alerts	28
1.2.3 Evacuation preparedness	29
1.2.4 Organizing mock drills	29
1.3 Response Plan	30
1.3.1 Disaster Emergency Response Force	30
1.3.2 Crisis Management direction and coordination	30
1.3.3 Incident Command System	30
1.3.4 Rapid damage assessment and reporting	31
1.3.5 Search and rescue	33
1.3.6 Medical response	33
1.3.7 Logistic arrangements	34
1.3.8 Communications	34
1.3.9 Temporary shelter management	34
1.3.10 Water and Sanitation	35
1.3.11 Law and order	35
1.3.12 Public grievances/ media management	35
1.3.13 Animal care	36
1.3.14 Management of deceased	36
1.3.15 Civil Defense and Home Guards	36

1.3.16	Role of Private Security	36
1.3.17	NGOs and Voluntary organizations	36
1.3.18	Relief management planning	37
1.3.19	Media management	37
1.3.20	Fire Services	37
1.4	Recovery and Rehabilitation Plan	38
1.4.1	Restoration of basic infrastructure	38
1.4.2	Reconstruction of damaged buildings/ social infrastructure	38
1.4.3	Restoration of livelihood	38
1.4.4	Psycho-social interventions	38
1.5	Cross cutting elements	39
1.5.1	Community Based Disaster Management	39
1.5.2	Needs of the Special vulnerability Groups	39
1.5.3	Addressing climate induced anthropogenic issues	39
2	Standard Operating Procedures:	40
2.1	General SOPs for each line department	40
2.2	Hazard Specific SOPs	41
3	Financial Provisions for Disaster Management	41
3.1	District Disaster Response Fund	41
3.2	District Disaster Mitigation Fund	41
4	Coordination Mechanisms with Other Stakeholders	42
4.1	Mapping of Stakeholders in the District	42
4.1.1	Public and Private Sectors	42
4.1.2	NGOs and CBOs	42
4.1.3	Religious Institutions	42
4.1.4	Academic Institutions	43
4.1.5	International Humanitarian Organizations	43
4.2	Responsibilities of the Stakeholders	43
5	Inter- District Coordination Mechanisms – [Standard Operating Procedures / Protocols]	43

---

6	Intra- District Coordination Mechanisms – [with Block Headquarters]	43
7	Dissemination of the Plan	44
	7.1 Plan Evaluation	44
	7.2 Plan Update	44
8	Annexure:	45
	8.1 Important Contact Numbers	45
	8.2 District profile support files	45
	8.3 Inventory of resources	45
	8.4 Media related detailed information	45
	8.5 Do's and Don'ts of potential hazards	45
	8.6 Detailed maps	45



## Structure of District Disaster Management Plan (DDMP)

### A . GENERAL

#### A 1 Overview

##### Location and administrative divisions

The district of Dewas is sprawled on an area of 7020 sq.kms within the latitudes of 20.17 and 23.20 N and longitudes of 77.54 and 77.08 E. There are 4 subdivisions, 8 tehsils, 6 blocks and 14 municipal boards. There are 497 gram panchayats and 1125 villages constituting this district. On a linguistic basis , Dewas was formed in the year 1956. It is surrounded by Ujjain in North, Indore in west, west-Nimar in South west, east nimar in south, hoshangabad in south east, Sehore in the east and Shajapur in North east.

<b>Location (in degrees) -</b>	Latitude – 20.17’ – 23.20’ N Longitude – 77.54’ – 77.08’ E
<b>District Area (in sq. kms.) -</b>	7020.00
<b>Administrative information-</b>	
<b>No. of sub divisions:</b>	4
<b>No. of Tehsils:</b>	8
<b>No. of Municipal Boards</b>	14
<b>No. of Blocks:</b>	6
<b>No. of Gram Panchayats:</b>	497
<b>No. of Villages:</b>	1125
<b>Year of district formation:</b>	1956
<b>Name of adjacent districts:</b>	Ujjain in North, Indore in west, west-Nimar in South west, east nimar in south, hoshangabad in south east, Sehore in the east and Shajapur in North east.

	<b>Police stations</b>	<b>Police chowkees</b>	<b>Post offices</b>
Tonkhurd:	1	1	15
Khategaon	2	2	28
Kannod	3	0	36
Dewas	3	2	37
Bagli	3	2	32
Sonkach	3	2	24

Source: District statistical book (Dewas)

### A 1.1.2 Geography and Topography

The rivers of Narmada, Shipra, Lodhari, Jamner and Kalisindh are the important rivers that run across Dewas district. The Indira Sagar Dam in Satwas tehsil acts as a major dam of the district. Shakraad and Naadinkari are the mountains prevailing here. The highest elevation in Dewas is near the Bharatpura village in Bagli tahsil with a magnitude of 2372m. The reserve forest covers around 1889.141 sq.km while the protected counterpart covers 134.336 sq.kms.

<b>Name of rivers and lakes:</b>	Narmada, Shipra, Lodhari, Jamner, Kaalisindh. No of lakes: 241.
<b>No. of dams, embankments:</b>	Indira Sagar Dam (Satwas tehsil)
<b>Name of existing mountains:</b>	Shakraad and Naadinkari in south.
<b>Highest elevation (in meters):</b>	2372, near Bharatpura village in Bagli tahsil.
<b>Forest cover in the district:</b>	Reserve: 1889.141 sq km. Protected: 134.336 sq km

Source: District statistical book (Dewas)

### A 1.1.3 Demographic and socio economics

The total number of households in Dewas are 2,97,652. The total population according to the latest records is 1563107, 805212 being men and 757895 being women. Population density comes to around 223 people per sq km. The total number of APL families are 179806, BPL 117846 and AAY ones are 27605. Majority of the people at Dewas take up agriculture as their main occupation and labor, masonry and factory work as secondary occupation.

<b>Total household:</b>  <b>Total population:</b>  <b>Male:</b>  <b>Female:</b>  <b>Population density:</b>	2,97,652 (Source: Census 2011 data)  1563107 (Source: Census 2011 data)  805212 (Source: Census 2011 data)  757895 (Source: Census 2011 data)  223 per sq km (Source: Census 2011 data)
<b>Income -</b>  <b>Per capita income:</b>  <b>Total APL, BPL families:</b> Source: Department of Food Dewas	Calculated at the state level  <b>Total APL: 179806 BPL: 117846 AAY: 27605</b>
<b>Occupation -</b>  <b>Main occupation of people:</b>  <b>Secondary occupation of people:</b>	<b>Agriculture</b>  <b>Daily labor, Factories, Migrant labors.</b> Source: Planning Department (Dewas)

	APL	BPL	AAY
<b>Dewas city</b>	<b>49020</b>	<b>30165</b>	<b>3736</b>
<b>Dewas rural</b>	<b>24529</b>	<b>12467</b>	<b>3129</b>
<b>Sonkach</b>	<b>21138</b>	<b>11185</b>	<b>3606</b>
<b>Tonkhurd</b>	<b>15041</b>	<b>9496</b>	<b>2566</b>
<b>Bagli</b>	<b>30168</b>	<b>19933</b>	<b>6079</b>



<b>Kannod</b>	<b>22540</b>	<b>19411</b>	<b>5595</b>
<b>Khategaon</b>	<b>17370</b>	<b>15189</b>	<b>2894</b>

#### A 1.1.4 Climate and weather

The average rainfall for the last 10 years comes to around 1067.1 mm. the average maximum temperature is around 47 degree centigrade and average minimum goes to 25.3 degree centigrade. Floods may take place in the months of July, August and September and the months of April, May and June might witness drought.

<p><b>Rainfall-</b></p> <p><b>Total annual rainfall of last year:</b></p> <p><b>Average rainfall ( last 10 years):</b></p>	<p><b>The excel sheet for whole of last 10 year's rainfall available.</b></p> <p><b>1067.1 mm</b></p>
<p><b>Temperature-</b></p> <p><b>Average Temperature:</b></p> <p><b>Average Temperature:</b></p> <p><b>Maximum</b></p> <p><b>Minimum</b></p>	<p><b>47.00 degree centigrade</b></p> <p><b>25.3 degree centigrade</b></p>
<p><b>Demarcation of crucial seasons-</b> <i>(Pl. refer data of last 10 years)</i></p> <p><b>Months of excess rainfall, leading to flood situation:</b></p> <p><b>Months of water scarcity, leading to drought situation:</b></p>	<p><b>Mid July, August, September.</b></p> <p><b>April, May, June.</b></p>

Source: Home Commandant Dewas

#### A 1.1.5 Health (Medical)

The district hospital is situated in Dewas block. There are Community health centers, primary health centers, sub health centers catering to the requirements of people all across the various blocks. Medical officers and paramedics at the institutions are been appointed according to the requirements of the hospitals. The number of ambulances and beds are provided in the table below.

Sn	Name of District	Block Name	DH	CHC	PHC	SHC	MO	Paramedicals at Institutes	Total No. of Beds	Total No. of Ambulance
1	Dewas	Dewas Urban	1	--	--	--	28		400	2
2		Baroatha		1	3	35	7	15	22	0
3		Sonakatch		1	2	26	5	16	40	0
4		Tonkkhurd		1	1	19	4	11	18	1
5		Bagli		1	6	44	4	29	70	1
6		Khategaon		1	3	25	2	15	25	2
7		Satwas (Kannod)		1	8	31	10	29	82	4
<b>Total</b>			<b>1</b>	<b>6</b>	<b>23</b>	<b>180</b>	<b>60</b>	<b>115</b>	<b>657</b>	<b>10</b>

### List of all hospitals blockwise available in hardcopy.

Source: Health Department Dewas

#### A 1.1.6 Education

Schools of all cadres are present across the Dewas district. Enrolment of students in every level block wise is provided in the table below. There is one college catering to Engineering students (Synergy) and one medical college (B.U.M.S). There are 9 government degree colleges and 11 private degree colleges.

#### Literacy rates block wise including the total number of males and females.

	Bagli	Dewas	Kannod	Khategaon	Sonkach	Tonkhurd
Literacy rate	<b>51.86</b>	<b>71.46</b>	<b>50.80</b>	<b>55.82</b>	<b>63.73</b>	<b>63.20</b>
Total male	<b>58004</b>	<b>63325</b>	42597	<b>37632</b>	41893	41971
Total female	29033	30231	18602	18742	20094	20660

#### Number of schools:

	Sonkach	Bagli	Dewas	Kannod	Khategaon	Tonkhurd
Primary and pre primary	229	427	324	270	237	169
Middle	84	156	286	87	89	78
High	8	20	20	12	12	12
Upper	4	8	11	3	3	3

middle						
Ashram	2	5		4	3	2

#### Teachers in high schools and higher secondary:

	Govt	Private	Total
Dewas	324	418	742
Sonkach	93	62	155
Tonkhurd	78	74	152
Bagli	99	60	159
Kannod	124	63	187
Khategaon	68	58	126

**No. of Anganwaris:** 1493

**No. of Engineering colleges:** 1 (Synergy college)

**No. of Medical colleges:** 1 (B.U.M.S)

#### No. of Other colleges:

9 government degree colleges, 11 private colleges.

**KP college:** profs=44 students=2727

**GDC college:** profs=15 students=1091

**Sonkach college**=10 students=314

**Hatpiplia college**=6 students=150

**Bagli college**=7 students=190

**Kannod college**=6 students=508

**Khategaon college**=13 students=427

Source : Education Department Dewas

#### A 1.1.7 Agriculture and Land use

The major crops grown in Dewas are Soya bean, Jowar, Maize , Sugarcane and Wheat. The cropping seasons are Kharif and Rabi based on the summer and winter times of cropping. The land is classified into uncultivated or barren land, cultivated and pasture land



which account to 469.40, 3,91,000 and 206636 hectares respectively. The soil in Dewas is medium , deep black cotton soil and it comes under the Malwa zone.

<b>Cropping pattern -</b>  <b>Type of major crops:</b>  <b>Cropping seasons:</b>	<b>Soya bean, Jowar, Maize, Sugarcane, Wheat.</b>  <b>Kharif and Rabi</b>
<b>Land classifications-</b>  <b>Forest land:</b>  <b>Barren &amp; Uncultivated land:</b>  <b>Cultivated land:</b>  <b>Pasture land:</b>	<b>Reserve: 1889.141 sq km.</b> <b>Protected:134.336 sq km</b> <b>469.40 hectares</b>  <b>3,91,000 hectares</b>  <b>206636 hectares</b>
<b>Soil classifications</b>	<b>Medium , deep black cotton soil</b> <b>Malwa zone.</b>

**Source:** Agriculture Department Dewas

#### A 1.1.8 Housing Pattern:

The most general housing pattern found in Dewas is Pucca. RCC structure which adopts a certain structure with a beam supporting the house is followed. Mostly, bricks are used for the walls and flooring material and tiles are used for flooring. G+1 pattern is generally seen but there are G, G+2 and G+3 as well in some places.

<b>Housing pattern-</b>  <b>Type of housing construction:</b>  <b>Type of material used:</b>  <b>Flooring types: (Ground and above)</b>	Standards for district housing pattern and numbers of houses available in hardcopy  Pucca houses  RCC structure used. Bricks used for walls and flooring material and tiles used for flooring.  G+1 is the general pattern observed all
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	across though G and G+2 and G+3 are observed intermittently.
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According to census, 40.5% of houses have unburnt brick walls and 0.5% have stone walls. Category A has 41.0% houses, category B has 42.8% houses and category C has 12.9%.

Source: Nagar Nigam Dewas, Vulnerability atlas.

#### A 1.1.9 Industrial set ups

There are 239 small and micro industries and 52 large and medium industries in Dewas district. The workforce involved in the small and micro industries are 5217 people and in large and medium are 20104. Till now, no industrial hazards have occurred in the district of Dewas.

<p><b>Total no. of industries</b></p> <p><b>a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:</b></p> <p><b>Total workforce involved in these industrial units:</b></p> <p><b>b) No. of Medium and small scale industries :</b></p> <p><b>Total manpower involved in these units:</b></p>	<p><b>Available in hardcopy.</b></p> <p><b>Information or records on hazards or pollution are not explicitly shared.</b></p> <p><b>No of Micro and Small: 239</b></p> <p><b>Workforce Micro and small: 5217</b></p> <p><b>No of Large and medium: 52</b></p> <p><b>Workforce in Large and medium:20104</b></p> <p><b>(Details of all industries available in hardcopy)</b></p>
<p><b>Any major accident occurred in any of the industrial units (Loss of life &gt;10, or Financial loss &gt; 1 Crore).</b></p>	<p><b>No such record</b></p>

Source: Department of Industries , Dewas

#### A 1.1.10 Transport and communication network

##### **AIR**

Nearest airport situated at Indore are about 40 km away from Dewas. Domestic air carrier like Indian airlines and private airlines like Sahara, Jet airways connect Indore to Delhi, Mumbai, Chennai and all major cities.

##### **RAIL**

Dewas is well connected by good train services to Delhi, Mumbai, Calcutta, Madras, Jaipur and all major cities.

##### **Road**

Dewas is situated on National Highway No. 3 ( AGRA-BOMBAY Road). The town of DEWAS is centrally located having links to adjoining districts viz. Ujjain (The religious city of Mahakal), Sehore, Bhopal (M.P.State Capital) and Indore. The city is well connected by road. It is situated at a distance of 560 K.M. from Agra, 160 K.M. from Bhopal, 33 K.M. from Ujjain and 35 K.M. from Indore by road.

**Communication:**

There are around 35000 GSM and 3109 CDMA connections in Dewas. There are 88 telephone exchanges out of which 81 are rural and 7 are urban. the total number of telephone connections are 13923 according to the census 2011. There are around 63 broadband stations and no HAM stations at all.

<p><b>1) Communication network</b></p> <p><b>i) No. of wireless stations in the respective blocks</b></p> <p><b>ii) Availability of telephone, mobile services in each block</b></p> <p><b>Total telephone exchange</b>  <b>Rural</b>  <b>Urban</b>  <b>Total connections</b>  <b>Per 100people</b></p> <p><b>iii) Availability of internet facility in the blocks</b></p> <p><b>iv) No. of HAM Radio Stations in the blocks</b></p>	<p><b>GSM: 35000</b>  <b>CDMA: 3109</b>                  The table is attached in the Annexure</p> <p><b>88</b>  <b>81</b>  <b>7</b>  <b>13423</b>  <b>0.86</b></p> <p><b>Broadband:63 stations.</b></p>
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	Tonkhurd	Khategaon	Kannod	Dewas	Sonkach	Bagli
<b>Pucca</b>	<b>154</b>	<b>129</b>	<b>202</b>	<b>761</b>	<b>192</b>	<b>212</b>
<b>Kucha</b>	<b>11</b>	<b>11</b>	<b>26</b>	<b>15</b>	<b>27</b>	<b>29</b>
<b>No of villages connected by road</b>	<b>18</b>	<b>18</b>	<b>31</b>	<b>121</b>	<b>18</b>	<b>67</b>

No of railway stations in Dewas block = 3

**A 1.1.11 Power stations and electricity installations**

The district of Dewas has no power stations but instead has power substations.

<p><b>List of power stations in the district:</b></p> <p><b>Electricity outreach in the district:</b></p>	<p><b>Enclosed in hardcopy</b></p> <p><b>Outreach for the months of Jan, Feb and March available in hardcopy</b></p>
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<p><b>Available sources of electricity in district, like DG sets etc:</b></p>	<p><b>There has been monitoring on this from 2 years and hence data was inaccessible</b></p>
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Source: Department of Power and Electricity , Dewas

**A 1.1.12 Major historical, religious places, tourist spots**

Dewas is well known for its famous Maa Chamunda tekri mandir to which people from all over flock to visit the deity. There has been a record of 1-1.5 lacs of people visiting on Amavasya. The Kela deva temple is also a religious place to which devotees come in large numbers on Chaitra navaratri. Mahakaleshwar temple gets devotees on the eve of Mahashivaratri. The historical places in Dewas are Pawar Chattries, Gidya Khoh and Fatehgarh Fort. The tourist spots in the district are Kavadia hills and Kitty falls.

<p><b><u>List of historical places in the district:</u></b>                  Pawar Chattries                  Gidya Khoh                  Fatehgarh Fort</p> <p><b><u>List of religious centers in the district:</u></b>                  Chamunda tekri, Dharaji ( 1 – 1.5 lacs of people on Amavasya)                  Siddheswar Mahadev                  Kela deva Temple (high density of people on chaitra navaratri)                  Mahakaleshwar temple (lakhs of devotees on Mahashivratri)</p> <p><b><u>List of the tourist spots in the district:</u></b>                  Kavadia hills                  Kitty falls</p>
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Source: Home Commandant office, District Portal, NIC.

**A 1.2 Scope and Ownership of District Disaster Management Plan**

*The portion from 1.2 to 1.5 will primarily address the necessity of the plan, changing context of disaster management, policy, responsibility and authority of the district plan, aims and objectives of the plan, multi hazard approach towards the disasters, when the plan was prepared and any other information that helps to understand the context and relevance of the Disaster Management (DM) plan.*

**A 1.2.1 Authority of the Plan**

**A 1.2 Scope and Ownership of District Disaster Management Plan**

Any type of disaster, be it natural or manmade, leads to immense loss of life, and also causes damage to the property and the surrounding environment, to such an extent that the normal social and economic mechanism available to the society, gets disturbed.

The Govt. of India, recognized the need to of a proactive, comprehensive, and sustained approach to disaster management to reduce detrimental effects of disasters on overall socio-economic development of country, and came out with Disaster Management (DM) Act 2005, and highlighted the role and importance of District Disaster Management Plan. The Govt. of Madhya Pradesh (GoMP) also believes that there is a need for a Disaster Management Plan in every district that articulates its vision and strategy for disaster management in the state. In this context the Madhya Pradesh State Disaster Management Authority (MPSDMA) provides guidelines to various entities involved in disaster management in the state to discharge their responsibilities more effectively.

Further, as per the DM Act, the District Disaster Management Authority to be formed in each district and it will be the nodal agency for preparation, functioning and review of the District Disaster Management Plan (DDMP).

The scope of district disaster management plan is very wide, and it is applicable in all the stages of disasters (before, during, after & non disaster time). The DDMPs can help officials in taking important decisions and also provide guidance to direct subordinates in emergency. The DDMP helps in saving the precious time, which might be lost in the consultations, and getting approval from authorities.

It will be the responsibility of the District Disaster Management Authority members to look after the district and sub district level institutionalization activities pertaining to the disaster management, including the periodic review of district disaster management plan and allied functions.

DDMP is an operational module for district administration (owned by the DDMA) and it helps to effectively mitigate the different types of disasters with locally available persons and resources. It also ensures a checklist for all the stakeholders for an action oriented response structure and to study their preparedness level.

### **A 1.2 Purpose of the Plan**

To make the district safer, and respond promptly in a coordinated manner in a disaster situation, mitigate potential impact of disasters in order to save lives of people and property of the respective district.

### A 1.3 Key Objectives

Complying with the DM Act 2005, the objectives guiding the formulation of the plan are:

- Assess all risks and vulnerabilities associated with various disasters in the district
- Promoting prevention and preparedness by ensuring that Disaster Management (DM) receives the highest priority at all levels in the district.
- Prevention and minimization of loss of human lives and property by gearing up preparedness, prevention & mitigation of disasters
- To provide clarity on roles and responsibilities for all stakeholders concerned with disaster management so that disasters can be managed more effectively
- Assisting the line departments, Block administration, urban bodies and community in developing coping skills for disaster management & Ensuring that community is the most important stakeholder in the DM process.
- To strengthen the capacities of the community and establish and maintain effective systems for responding to disasters
- Developing convergence of action in addressing, preventing and mitigating disasters and to equip with maximum possible relief measures and to resort to pre-disaster, during and post-disaster steps.
- To establish and maintain a proactive programme of risk reduction, this programme being implemented through existing sectoral and inter-sectoral development programmes and
- Mainstreaming DM concerns into the developmental planning process.
- Encouraging mitigation measures based on state-of-the-art technology and environmental sustainability.
- To address gender issues in disaster management with special thrust on empowerment of women towards long term disaster mitigation
- Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communications and Information Technology support.
- Encourage training and create awareness, rehearsals, dissemination of knowledge, and information on DM among all the citizens living in the district.
- Ensuring relief/assistance to the affected with care, without any discrimination of caste, creed, community or sex
- Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat.
- Undertaking recovery to bring back the community to a better and safer level than the pre-disaster stage
- To develop disaster management as a distinct management discipline and creation of a systematic and streamlined disaster management cadre

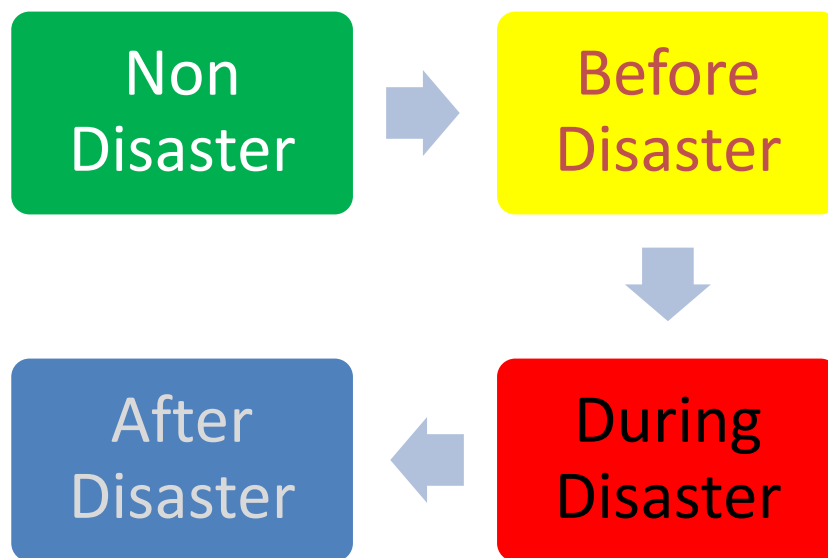


### A 1.4 District Plan Approach

The aim of the plan is to establish necessary systems, structures, programs, resources, capabilities and guiding principles for reducing disaster risks and preparing for and responding to disasters and threats of disasters in respective district, in order to save lives and property, avoid disruption of economic activity and damage to environment and to ensure the continuity and sustainability of development.

The district disaster management plan has a holistic and integrated approach with emphasis on prevention, mitigation and preparedness by ensuring that Disaster Management receives the highest priority at all levels in the district. It has a paradigm shift, similar to the lines of national and state level, from reactive and relief centric approach to disasters. The approach is aimed to conserve developmental gains and also minimize losses to lives, livelihood and property.

For efficient execution of the District Disaster Management Plan, the Plan has been organized as per these four stages of the Disaster Cycle.



Non disaster stage: Activities include disaster mitigation, leading to prevention & risk reduction.

Before disaster stage: Activities include preparedness to face likely disasters, dissemination of early warnings.

During disaster stage: Activities include quick response, relief, mobilization of search & rescue, damage assessment.

After disaster stage: Activities include recovery & rehabilitation programs in disaster affected areas.

## A 2. Institutional Arrangements

### A 2.1 District Disaster Management Authority (DDMA)

<b>Date of inception of DDMA</b>	<b>Under the process</b>
<b>Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc</b>	<b>Chairman: District Collector</b> <b>Secretary: Chairman, Zilla Panchayat</b> <b>Members: Upper Collector, Dewas</b> <b>Police Commissioner, Dewas</b> <b>Chief Medical Officer, Dewas</b> <b>Karya paalan Yantri, Lok nirman vibhag</b> <b>District Commandant, Dewas.</b>

According to the DM act 2005, the DDMA should constitute of the following members:

<b>1. Deputy Commissioner</b>	<b>Chairperson</b>
<b>2. Supdt. Of Police</b>	<b>Member</b>
<b>3. Chief Medical Officer</b>	<b>Member</b>
<b>4. Superintending engineer (PWD)</b>	<b>Member</b>
<b>5. Superintending Engineer (I&amp;PH)</b>	<b>Member</b>
<b>6. Superintending Engineer (MPP&amp;P)</b>	<b>Member</b>
<b>7. Chairperson of the Zila Parishad</b>	<b>Member</b>

#### **DDMA roles:**

- Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines.
- Providing inputs to MPSDMA relating to various aspect of disaster management including early warnings, status of preparedness etc
- Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues
- Developing an appropriate relief implementation strategy for the district taking into account the unique circumstances of the district and prevailing gaps in institutional capacity and resources of the district

- Facilitating and coordinating with local govt bodies to ensure that pre disaster DM activities in the district are carried out optimally
- Facilitating community training, awareness programs and the installation of emergency facilities with the support of local administration, NGOs and the private sector
- Establishing adequate interdepartmental coordination on issues related to disaster management
- Reviewing emergency plans and guidelines
- Involving the community in the planning and development process
- Ensuring that local authorities including municipal corporation, gram panchayatss etc in the district are involved in developing their own mitigation strategies
- Ensuring appropriate linkage between DM activities and planning activities
- Revisiting or re assessing contingency plans related to disaster management
- Ensuring that proper communication systems are in place and contingency plans maximize the involvement of local agencies

**DDMC** is not yet formed but these are the members proposed for the committee:

1	Deputy Commissioner	Chairperson
2	Superintendent of Police	Member
3	Chairperson, Zila Parishad	Member
4	Additional Deputy Commissioner	Member
5	Additional District Magistrates	Member
6	Commissioner Municipal Corporation	Member
7	Chief Medical Officer	Member
8	Superintending Engg. (I&PH)	Member
9	Superintending Engg. (PWD)	Member
10	Superintending Engg. (MPSEB)	Member
11	District Food & Supplies Controller	Member
12	Commandant, Home Guards	Member
13	Commandant, ITBP (Hqrs.)	Member
14	Commandant, GREF	Member



15	District Fire Officer	Member
16	District Public Relation Officer	Member
17	Divisional Manager, HRTC	Member
18	General Manager, Telecommunication	Member
19	Conservator of Forests	Member
20	District Revenue Officer	Member Secretary
21	From two prominent NGO's working in the district in the field of Disaster Management	Member

Source: Department of Relief, Home Commandant office, NDMA.

### A 2.3 District Emergency Operations Center (DEOC) / District Control Room (DCR)

<b>Location of the DEOC / DCR:</b>	<b>Collectorate</b>
<b>Involved agencies in DEOC / DCR, Roles and responsibilities of the officials / nodal persons (phase wise):</b>	<b>All the 24 line departments are involved. Homeguard dpt, health, food, fire, relief etc.</b>
<b>Equipments installed (software and hardware):</b>	<b>A landline phone and a mobile phone</b>

#### **Composition of DEOC as prescribed:**

Logistics Officer

Finance Officer

Liaison Officer (volunteer/Interagency)

Public Information

District In charge

Extension ESF Heads

Source: Department of Relief (Collectorate)

#### **A 2.4 Urban Area Disaster Management Committees:**

Subject to the directions of the District Authority, the Urban Area disaster management committees will be responsible for the development and implementation of their respective urban area disaster management plans.

#### **A 2.6 Gram Panchayat/Village Disaster Management Committee**

Subject to the directions of the District Authority, the *Gram Panchayat* Disaster Management committees will be responsible for the development and implementation of GP level disaster management plans.

#### **A 2.6 Block Level Disaster Management Committee (With details of telephone numbers in Annexure)**

As proposed by the DM act 2005, block level DM committees should consist of:

1	Block Development Officer	Chairperson
2	SHO, Police Station	Member
3	Chairperson, Panchayat Samiti-Block	Member
4	Medical Officer In charge, Dispensaries	Member
5	Assistant Engineer, I&PH	Member
6	Assistant Engineer, PWD	Member
7	Assistant Engineer, MPSEB	Member
8	Inspector, Food & Supplies	Member
9	Platoon Commander, Home Guards	Member
10	Range Officer, Forests	Member
11	In charge, Fire Station	Member
12	Junior Engineer (JTO), Telecom	Member
13	SEBPO	Member Secretary
14	From two prominent NGO's working in the block in the field of Disaster Management	Members

## **B . HAZARD, VULNERABILITY ASSESSMENT AND RISK PROFILING (HVRC)**

### **B 1. Hazard Assessment**

**Table B.1.1 Major applicable hazards**

**FLOOD:**

The reasons behind the occurrence of floods in Dewas are excessive rainfall in short span of time, obstruction to natural drainage of rainfall water, poor maintenance of drains leading to their damage, construction of bhawans extremely near to drains, lack of standard technology in previously constructed drains, problem in drainage of water due to construction by the administrative construction agencies over the drains, lack of cleanliness lead to choking of drains by plastic and polythene. But the most important reason behind the floods are the presence of major rivers like Narmada, Kalisindh , etc. which overflow onto the banks and pose hazard for the people and property in there.

**EARTHQUAKE:**

Dewas district comes under zone 3 and some part of it has been proposed for zone 4. Therefore preparedness planning for earthquake in the district is must. Moreover keeping in view the housing structures preparedness for earthquake is nil. Therefore PWD should be the nodal agency that will work towards making the houses earthquake prone in order to minimize the mishap.

**FIRE:**

Dewas is vulnerable to fire hazards. Also there is need to develop techniques to overcome the fire hazard for multi-storied buildings.LPG, propane, motor spirit, high speed diesel and superior kerosene are major chemicals to create emergency situations in the district. Based upon the physical and chemical properties of these chemicals, it has been identified that following hazards should be considered for the on-site and off-site emergency planning:

- Fire: Pool fire, Jet fire, flash fire liquid
- Explosions: Vapour cloud explosions(VCE), Boiling Expanding Vapour Explosions (BLEVE)

**Table B.1.2 History of past disasters**

Type of hazard	Year of occurrence	Area affected	Impact on life	Livelihood	Livestock	Hazard prone zone in district
Flood	1971,83,84,86,91,96,97,98,99,2004,2006,2007.	Villages on the Banks of River				



Illiprakop	October 2007	Narmada Soya fields		Loss in Soya crop		
Olla(Hailstorm )	11 <sup>th</sup> March 2010	Anywher e in the district		217.88 lakhs of property loss 170 families disturbed	Affected	Anywhere in the district
Fire	March 2010	Urban Dewas	180 peopl e died	36.43 lakhs worth property lost.		Urban Dewas,M oti bangla kshetra
Drought	2011	Bagli				

Source: Department of relief.

Table B.1.3 Seasonality of hazards

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood		yes	yes	yes	yes	yes	Yes yes	Yes yes	Yes yes	yes	yes	yes
Earthquake	yes			Yes	Yes	Yes						
Loo												
Tag(hindi)												
Accidents	yes	yes	Yes	yes	Yes	yes	Yes	Yes	Yes	Yes	yes	Yes
Tussar/ pala( hindi)	yes	yes					Yes	yes	yes	Yes		Yes
Illiprakop		yes	yes									Yes
Olla vrusti	yes											

Source: Department of Relief

## B 2 Vulnerability Analysis

Name of Hazard	Hazard prone Block, GPs
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<b>Flood</b>	<b>(Annexure)</b>
<b>Earthquake-</b>	<b>Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad,dhardi.</b>
<b>Fire</b>	<b>udaynagar,</b>
<b>Drought-</b>	<b>Tehsil Bagli, karnavad, bagli</b>
<b>Industrial :</b>	<b>indore- namavir road(inflammable tankers keep moving there)</b>
<b>Road accidents:</b>	<b>indore –nemawar state highway no 59,SH-22, Robery: Khedakhil forest area.</b>

The vulnerability faced range from physical vulnerability to social and economic vulnerability.

**Physical Vulnerability :** Physical vulnerability is the set of existing weaknesses which render to the sensitivity to get affected by the various hazards that can happen and hence lead to a disaster. Every year flood like situations are created in the district because of backwaters from dams, overflowing of rivers and also the rainwater collected from its catchment areas present in the district.

**Social Vulnerability:** Disasters deprive people of their jobs and hence their source of livelihood is lost which forces them to either migrate or switch their jobs. Social vulnerability is the vulnerability which is due to the social status of the people which adds to the proneness of the

people towards disaster. The eradication of this vulnerability is completely in the control of people but by choice.

**Economic Vulnerability:** As the district is laying face down to floods, earthquakes, fire, hail storms, epidemics, etc which directly affect the agricultural produce, thus it decreases the livelihood options for villagers whose major occupation is either agriculture or are agricultural labors. Economic vulnerability is caused because of the economic stratification of the society and this vulnerability is as complicated as the social vulnerability.

**Institutional Vulnerability:** There is strong need to create awareness among community regarding health and safety, Absence of relief Team at village level creates a disastrous situation for villagers. Gram Raksha Samiti should help in forming volunteered team from youth to help in the early hours of any disaster. Lack of advanced technology in the district control rooms and other established head quarters is a serious problem. All the blocks are institutionally vulnerable.

**Environmental/ Natural vulnerability:** The blocks of Kannod and Khategaon are more naturally vulnerable because of the presence of rivers and riverlets and the proximity of Narmada also contributes to the same.

Source: Department of relief

### B 3. Capacity Analysis

Table B 3.1 Resource inventory.

Resource Type	Details	Number	Govt, Private	Contact no. of nodal person/s
Emergency Search lights	Under nodal person R.K.Mishra	2	Govt	7828866611
Trained manpower, professionals available in specific domain like S&R ,First Aid, Response Warning, Swimming etc.	R.K.Mishra	1	Govt	7828866611
Availability of equipments like Bulldozers, Hydra,	R.K.Mishra	Bulldozers=1,hydra=0, List, Water	Govt	7828866611



Crane, for clearance, JCB		tanker=17,JCB=5		
Transportation(Fit Vehicles available with nodal agencies, in emergency)	Updated list in annexure	Refer Annexure	Govt and pvt	Refer Annexure
Total no. of boats (with info about capacity, size, contacts of Orgn./owner etc)	<p>Country boats=0</p> <p>Motor boats=4</p> <p>Fibre boats(for 12 people)=0</p> <p>Inflatable boats=0</p> <p>Motor launch=2</p> <p>Rescue bank boats=0</p> <p>Engine motor boats=4</p>		Govt and private	Refer Annexure
Availability of fire fighting equipments, Fire tenders	<p>Fire fighting equipments-</p> <p>Foam nozzle(4)</p> <p>fog nozzle(4)</p> <p>small cutters(3)</p> <p>Fire tenders are of type B</p>			
Veterinary Hospitals	Enclosed in hard copy	Hardcopy		
Telephone Exchange	<p>Total=88</p> <p>Rural=81</p> <p>Urban=7</p> <p>Total connections=13423</p> <p>Per 100=0.86</p>			

Source: Dept of Fire, Home commandant

## B 4. Risks Assessment

Table B.4.1 Potential impact of applicable hazards and existing vulnerabilities

Type hazard	of	Vulnerable areas *	Vulnerability	Potential Impact	Identified safer places *
Flood		The blocks of Kahtegaon, Kannod and Bagli which are close to the banks of river Narmada.	People who live there unalarmed about the flood, also the livestock of the people there, poorly constructed houses.	Loss in life and livestock, houses can be washed out.	Potla , Pipri, Kanad, Udaynagar
earthquake,		No block recognized yet	Lives of people and livestock, houses on the zone.	Deaths, serious injuries, loss of livestock and property.	
drought,		All the blocks can be affected	Loss of lives and crop.	Stark reduction in food supply and deaths due to lack of water.	
stampede,		At places with famous temples or tourist places.	Lives of people who come there and also injuries.	Loss of life and injuries.	
hailstorm,		No such record.	People who are exposed to it at that time, livestock as well.	Loss of life and livestock.	
fire,		Places more prone to the loo.	Lives of people who live in thatched houses, livestock and property.	Loss of lives, severe injuries, loss of livestock and property.	
industrial disaster,		No such record.	People who work in the factories, people who live around the factory,	Loss of lives, poisonous gases spread around the place leading to genetic	

accidents,	On highways or for that matter anywhere.	water and air around.  People travelling in the vehicles, people in the vicinity of the accident.	impairments for the future generations, water and other resource pollution.  Loss of lives, severe injuries.	
epidemic,	No such record.	People who do not observe prevention.	Loss of lives or severe impact on health.	
landslide, and other applicable hazards	No such record.	People who live in that area.	Loss of lives and property.	

Source: Home commandant

**Risk profiling of the district Dewas:**

With maximum occurrence of floods more than any other disaster, we can safely say that Dewas is majorly a flood prone district. With some of the major rivers like Narmada , Kalisindh flowing across the district, during heavy rains floods become inevitable. The low lying areas especially get affected by the upsurge of the river waters and they are more vulnerable than the other places.

Though there haven't been any earthquakes since 1984, people have a conception that Dewas isn't an earthquake prone district. But the scientific or rather the seismic studies say that Dewas is situated in zone 3 and some part of it is even situated in zone 4. Hence Dewas can be counted as one of the earthquake prone districts as well.

Dewas has sometimes been exposed to hailstorms and pest attacks called illiprakop ( affecting crops).

**FLOOD:**

The reasons behind the occurrence of floods in Dewas are excessive rainfall in short span of time, obstruction to natural drainage of rainfall water, poor maintenance of drains leading to their damage, construction of bhawans extremely near to drains, lack of standard technology in previously constructed drains, problem in drainage of water due to construction by the administrative construction agencies over the drains, lack of cleanliness lead to choking of drains by plastic and polythene. But the most important reason behind the floods are the presence of major rivers like Narmada, Kalisindh , etc. which overflow onto the banks and pose hazard for the people and property in there. The villages and blocks prone to floods have been attached in the annexure. the places closer to the Hoshangabad district and hence to river Narmada are more



prone to floods and hence Dewas can be safely labeled as flood prone. there are villages recognized as flood prone and low lying and hence village level teams are more active.

### **EARTHQUAKE:**

Dewas district comes under zone 3 and some part of it has been proposed for zone 4. Therefore preparedness planning for earthquake in the district is must. Moreover keeping in view the housing structures preparedness for earthquake is nil. Therefore PWD should be the nodal agency that will work towards making the houses earthquake prone in order to minimize the mishap.

Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad, dhardi are the villages that may be affected by earthquake as they lie in the danger EQ zone.

Since zone 4 is said to be a dangerous zone, special plans should be made for the safety of the people residing in there. This zone requires special offsite and onsite preparedness plans.

### **FIRE:**

Dewas is vulnerable to fire hazards. Also there is need to develop techniques to overcome the fire hazard for multi-storied buildings. LPG, propane, motor spirit, high speed diesel and superior kerosene are major chemicals to create emergency situations in the district.

Udaynagar is more prone to fires.

The major reason behind the vulnerability to fire is the prevailing of heat waves or loo during the summers and this aggravates the fire that is caught in dry lands and forests.

### **Village wise risk profiling:**

Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad, dhardi are the villages affected or have the potential to be affected by earthquake.

The district of Dewas and Udaynagar are prone to fires.

There have been villages recognized which are prone to floods and are provided in the annexure.

## **C . DISTRICT LEVEL DISASTER MANAGEMENT PLANNING**

### **C 1 District Action Plans**

## C 1.1 Mitigation Plan

### C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes

Issues faced regarding constructions:

- Constructions taking place at individual level do not conform to the established construction norms.
- Norms aren't percolated to every level of construction.
- Infrastructure development should pass through all the stages in safety assurance.

Issues faced regarding infrastructure, repair & maintenance

- Regular monitoring and evaluation of buildings and other constructions should be ensured
- Repairs should be done according to the need.

Issues regarding transport

- Regular checking of vehicles and whether they are in proper working condition and repair of the vehicles when necessary and cancellation of license of bad conditioned vehicles.

**Sanitation:** Due to blocked drainage systems the water from the nearby rivers and lakes might have result in rebounding of the water hence resulting in flood. After disaster epidemics might break because of breakdown of sanitation system.

**Research & technology transfer:** Lack of dissemination of scientific and latest research to every level.

**Land use planning:** Lack of coordination between the revenue and land use department and the construction firms improper usage of land, changes in land use may not be in sync with the changing land use norms.

#### **Structural: Structural Mitigation Measures**

- a. Retrofitting of Buildings:** In Dewas region maximum buildings are non-engineered or kuchcha, having lower seismic resistant capacity. There are mainly four major types of constructions:

Category A: Adobe, fieldstone Masonry Buildings

Category B: Brick Construction Masonry Buildings

Category C: R. C. C. Construction

Category X: Traditional & Conventional Construction

The buildings of Category A are very weak and may get damaged even due to a lower intensity earthquake. There is a need for detailed assessment of buildings, which are vulnerable and may cause losses to life. Assessment of these buildings will help to evolve a strategy for their retrofitting. After assessment of vulnerability of buildings the priority for structural mitigation has to be defined. Generally public buildings are given first priority because they are lesser in number and at the time of disaster people can take shelter in these public buildings. Some examples of important buildings are hospitals, clinics, communication buildings, fire and police stations, water supply, cinema halls, meeting halls, schools and cultural buildings such as museums, monuments and temples. The second priority goes to other type of buildings like housing, hostels, offices, warehouses and factories.

- b. Construction control:** The best protection against earthquake is a strong built environment. The quality of buildings, measured by their seismic resistance is of fundamental importance. Minimum design and construction standards for earthquake and flood resistant structures legislated nationally, are an important step in establishing future minimum levels of protection for important structures. India now has building codes and regulations for seismic and flood resistant design. These codes are in constant review by the experts. The below mentioned building codes are generally practiced in India:

- **IS: 1893, 1984** - Criteria for earthquake resistance design of structures

- **IS: 13828, 1993** - Guidelines for improving low strength earthquake resistant masonry buildings
- **IS: 13920, 1993** - Ductile detailing of reinforced concrete structures subjected to seismic forces- code of practice
- **IS: 13827, 1993** - Guidelines for improving earthquake resistance of earthen buildings
- **IS: 13935, 1993** - Guidelines for repairing & seismic strengthening of buildings  
(Source: Department of Land use )

In Dewas, building by-laws and the Seismic Code must be enforced by the municipal and panchayat bodies.

#### **NON STRUCTURAL:**

Land use planning: Damage to a building depends primarily upon the soil conditions and topology of the area. Dewas district comes under moderate risk zone in terms of earthquake( Zone 3) and flood disaster. A part of it is also under zone 4 of earthquake and the villages on the banks of Shipra nadi and Kaalisindh are more prone to floods especially in monsoons.. Referring the geological map of the region, it has been observed that the cluster of small faults is concentrated near.

Training and awareness programs: Mitigation also includes training of people for making the houses safe from earthquakes and floods. Training modules have to be prepared for different target groups viz. engineers and masons about safe building practices and general 'do's and don'ts' for general public.

#### Mitigation strategies

The mitigation strategy for Dewas district involves the following elements:

- Further growth of human settlements in the low lying areas of Shipra and Narmada basins should be checked through land-use planning. Such areas are vulnerable not only from flood hazards but are also vulnerable to earthquake liquefaction, which may increase the damage manifold. The department of Town and Country Planning will take care of seismic hazards while preparing the development plans for the district;
- Appropriate building codes will be made applicable for new engineered & non engineered constructions, and should be strictly enforced by local body. The Municipal Corporation of local area will ensure the construction as per Indian Standard Building Codes;
- Infrastructure department will do the retrofitting of public buildings under their maintenance charge. Generally PWD, Rural Engineering Services and Housing Board maintain the public buildings. The expenditure for such retrofitting will be taken care under maintenance head.
- Community awareness will be raised regarding seismic resistant building construction techniques and seismic retrofitting of existing buildings. Housing Board will be the nodal agency to provide training through workshops and demonstrations. PWD and RES will support MPHBS in these efforts;
- Community awareness will be raised regarding 'do's and don'ts' in the event of an earthquake with the involvement of Panchayati Raj institutions and CBOs. Revenue department will be the nodal agency for this activity.

#### **Priority List of public buildings to be retrofitted in the most vulnerable tehsils of Dewas District**

First Priority (within three years)

1. All Hospital buildings
  - District hospital, Dewas
  - Civil hospital, Dewas
  - Community Health Centre, Dewas
2. Office of the district collector
3. Office of the Superintendent of Police
4. Police Control Room, Dewas



5. Police Control Room, Dewas
  6. All Police Stations of the vulnerable blocks of Dewas
  7. Tehsil buildings
  8. School buildings at block headquarters
  9. Residences of District Collector and S.P. at Dewas
- Second Priority (within five years)
1. Primary Health Centres.
  2. Office buildings of PWD, PHE, WRD, Homeguards
  3. Residences of other key officials of the district
- Third Priority
1. Rest of the Government buildings (**Source:** Nagar Nigam Dewas)

### **Development schemes :**

#### **NREGS:**

##### **NREGA GOAL**

- a. Strong social safety net for the vulnerable groups by providing a fall-back employment source, when other employment alternatives are scarce or inadequate
- b. Growth engine for sustainable development of an agricultural economy. Through the process of providing employment on works that address causes of chronic poverty such as drought, deforestation and soil erosion, the Act seeks to strengthen the natural resource base of rural livelihood and create durable assets in rural areas. Effectively implemented, NREGA has the potential to transform the geography of poverty
- c. Empowerment of rural poor through the processes of a rights-based Law
- d. New ways of doing business, as a model of governance reform anchored on the principles of transparency and grass root democracy

Hence NREGA can function in the disaster based scenario in the following manner:

1. Tubewells
2. roads for places which are not connected
3. leveling of low lying areas during flood to a higher level
4. construction of check dams and embankments and drainage systems.

NREGS can take part in long term planning and preparedness as well. With the help of technical support from technical guidance from professionals like construction material experts and civil engineers, they can build roads which are not connected and embankments for places which are more prone to floods. Check dams can also be constructed by them as such large scale works can be done by such big schemes only.

#### **IAY :**

The objective of this scheme is to provide dwellings to the families living below poverty line in the rural areas. Beneficiaries are selected by the gram panchayat. Priority in this scheme is given to freed bonded labourers, members of scheduled castes and tribes, war widows, handicapped and mentally retarded persons, ex-servicemen, retired personnel of paramilitary forces, oustees of development projects and victims of natural calamities.

Lack of dwellings in the rural areas is a major problem, especially for the poor and weaker section people, who have to live in inhuman conditions. Now, such people are getting their own sweet homes and the feeling of insecurity among them has ended.

During the last five years, 3 lakh 94 thousand 226 people have been benefited under the scheme.

Hence IAY can work in the following manner:

1. Rehabilitation: It can start constructions in the villages which are affected.
2. It can work and rework on the adherence with the construction laws.

#### **Sarva sikshya abhiyan:**

Create awareness about mitigation and preparedness about accidents that are in control of man, in collaboration with educational institutions.

Awareness can be incorporated in the regular education to make it a compulsory subject for students.

**NRHM:**

Functions of NRHM:

**Create awareness**

Health, Nutrition, basic sanitation, hygienic practices, healthy living and working conditions, information on existing health services and need for timely utilization of health, nutrition and family welfare services

**-Counseling**

Birth preparedness, importance of safe and institutional delivery, breast-feeding, immunization, contraception, prevention of RTI/STI. Nutrition and other health issues.

**- Mobilization**

Facilitate to access and avail the health services available in the public health system at Anganwadi Centers, Sub Center, PHC , CHC and district hospitals.

**- Village health plan**

Work with the village Health and sanitation Committee to develop the village health plan

**- Escorts/ Accompany**

Escorts the needy patients to the institution for care and treatment. She will accompany the woman in labor to the institution and promote institutional delivery

**-Provision of Primary Medical Health Care**

Minor ailments such as fever, first aid for minor injuries, diarrhea. A drug kit will be provided to ASHA

**- Provider for DOTS**

- Depot Holder ORS, IFA, DDK, chloroquine, oral pills and condoms

- Care of new born and management of a range of common ailments

- Inform Births, deaths and unusual health problem or disease out break

- Promote Construction of household toilets

Therefore in case of Disaster, NRHM can facilitate for voluntary first aid during disaster. Training of nurses can be carried out as a preparatory plan.

**Mukhyamantri Awas yojana:**

The Mukhyamantri Awas Yojana has been started in Madhya Pradesh with a view to providing dwellings to a large number of houseless families. Financial assistance to 33 thousand 739 families has been made available for constructing their own houses under the scheme which was launched in 2007.

The scheme has benefited those houseless people who do not come under the ambit of Indira Awas Yojana. Had this scheme not been implemented, such people would not have been able to construct their own dwellings.

Hence, it can facilitate in rehabilitation programs in affected villages. They can come up with a collaboration with the construction norms.

**Jal Abhishekh Abhiyan:**

Provide for clean drinking water during response and relief period, can work in collaboration with sanitation systems during relief period. Jal Abhishekh Abhiyan can work in collaboration with WATSAN.

**Samagra Swachta Abhyan:**

Sanitation can be ensured by them during relief camps. Since relief camps are the places where lot of diseases and epidemics may break out, proper defecation and sanitation should be ensured by this scheme.

**C 1.1.2 Training & Capacity Building**

The capacity of a community to withstand disasters is a function of-

- Awareness of the risks associated with disasters
- Understanding of appropriate responses to disasters
- Possessing the capacity to respond (training, research, availability of resources, skilled cadres)
- Setting up emergency response mechanism that mobilize and deploy these trained resources in a quick, efficient and systematic manner.

The above can be achieved with the help of MPSDMA and the relevant government departments. They can ensure that personnel in specialized areas (medical care, relief, etc) are adequately trained and available for deployment in emergency situations. The basic concepts relating to disaster management and the role of the community therein shall be included in the curriculum of schools. All this shall have a special thrust on empowering women towards long term disaster mitigation. It should enhance the existing capacity to limit damage by improving surveillance and early warning system. MPSDMA should stimulate the active involvement of the community, local groups, women and disabled people in disaster management programs with a view to facilitating the capacity of the community to deal with disasters. Promote and support research, development and the use of local knowledge in measures that are aimed at supporting risk reduction and relate to disaster management activities.

**C 1.1.3 Community Initiatives**

Communities are always the first responders and hence the DDMA / Distt. Authority will ensure Community participation through initiatives like Community Based Disaster Management (CBDM) to promote local ownership, address local needs, and promote volunteerism.

Aim of CBDRM is to reduce vulnerabilities, and increase capacities of households and communities to withstand damaging effects of any disaster. It enhances people's participation and empowers them in achieving sustainable development and sharing its benefits. With the help of outsiders they can address issues of situational analysis, planning and implementation of risk reduction and preparedness measures. Through a thorough assessment of communities' hazard exposure and analysis of specifics of the vulnerabilities as well as capacities, CBDRM forms the basis for activities, project and programs required to reduce disaster risk. Since they are one of the primary actors and should be actively involved in the preparation of plan.



#### **C 1.1.4 Risk Management Funding**

Short term provisions are expected to cover the immediate loss, incurred due to disasters. Whereas long term provisions include the set up of fire stations, watershed management, planting trees along the river etc.

Insurance schemes are important source of funds for restoration of private business enterprises. The Collector will coordinate with Insurance Companies to speed up settlement of insurance claims. It will help in restoration of private business enterprises. He will also coordinate with commercial banks for ensuring smooth flow of financial assistance from commercial banks for restoration of private business enterprises.

Agriculture department shall provide seeds and the required finance as loans through local banks for the resumption of agriculture activities. The district administration shall elicit the support funding of agencies like Care, CRS etc. for the resumption of agriculture and livelihood activities.

Revenue/Book Circulars contains standing instructions of the Government for distribution of ex-gratia payments to poor families, who suffer from disasters to initiate their recovery process. This assistance will be provided very promptly to the poor families by the functionaries of the Revenue Department.

**Short term funding:** RBC documents.

**Long term:** Fire equipments should be purchased as required and as per new technology. For eg: multistoried buildings ( masks aren't available), equipments for fire extinguishing in slum areas where fire brigade cannot enter.

Eco friendly watershed interventions to deal with drought situations, check dams for mitigating soil erosion should be established.

Planting trees on banks of rivers to prevent soil erosion and act as shelter belts.

#### **C 1.2 Preparedness Plan**

An effective flood forecasting system provides some lead-time to warn the communities, which are likely to get affected. It will be the responsibility of the revenue department to communicate the emergency warning in the rural areas and police department will be responsible for communicating warning in urban areas.

The district is affected by the hazards viz. earthquake and flood. Since there is no scientific warning system for earthquakes, Emergency Warning System is confined to the case of flood only. An effective flood warning system provides some lead-time to the community likely to be affected to respond. The system should integrate flood prediction, dissemination of warning information, response of agencies and the public in the threatened community. The purpose of warning about impending flood is to enable and persuade people and organizations to take action to increase safety and reduce the adverse impact of flooding.

The Chief Engineer (CE) maintains wireless communication with the dam authorities of the dams about the release of upstream water. Therefore, CE will maintain a control room to obtain the information about the release of water from the dams upstream and provide flood forecast/warning to District Collector during the rainy season.

The district Collector, and in his absence, OIC, DECR will authorize the issue of warning to the community likely to be affected and to the concerned response agencies.

Warning messages should use plain language and avoid technical terms and jargon. It should be direct and personalized as much as possible by focusing on what it means to YOU and what YOU can do about it.

Along with the general dissemination modes of warning viz. Radio, Television, Scheduled News bulletins, Local/Regional newspapers, and public address system should be thoroughly adapted for better results. Once a warning is issued, it should be followed up by subsequent warnings in order to keep the people informed of the latest situations.

### **Evacuation stage**

Evacuation is a risk management strategy, which may be used as a means of mitigating the effects of an emergency or disaster on a community. It involves the movement of people to a safer location. However, to be effective, it must be correctly planned and executed. The process of evacuation is usually considered to include the return of the affected community.

Shelter provides for the temporary respite to evacuees. It may be limited in facilities, but must provide protection from the elements as well as accommodate the basic personal needs, which arise at an individual level in an emergency.

The plan must allocate responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure, which facilitates the coordination of agencies and services and support of emergency workers. The following factors may need consideration:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity and number of victims.
- Approaches to the shelter location in light of disruption due to hazard impact and traffic blockades.
- Temporary accommodation
- Provision of essential facilities like drinking water, food, clothing, communication, medical, electrical and feeding arrangements, etc.
- Security
- Financial and immediate assistance
- First-aid and counseling

### **Types of evacuation**

For the purpose of planning, all evacuations may be considered to be one of two generic types:

- (a) Immediate evacuation, which allows little or no warning and limited preparation time as in the case of earthquakes and air accident.
- (b) Pre-warned evacuation resulting from an event that provides adequate warning and does not unduly limit preparation time as in the case of flood and cyclones.

### **Principles of Evacuation Planning**

- Establishment of a management structure for organization, implementation, coordination and monitoring of the plan.

- Determination of legal or other authority to evacuate.
- Clear definition of rules and responsibilities.
- Development of appropriate and flexible plans.
- Effective warning and information system.
- Promoting awareness and encouraging self-evacuation.
- Assurance of movement capability.
- Building confidence measures and seeking cooperation of the affected community.
- Availability of space for establishment of relief camps having requisite capacity and facilities.
- Priority in evacuation to be accorded to special need groups like women, old and sick, handicapped and children.
- For effective evacuation, organization and running of relief centres, cooperation and involvement of all agencies viz. Community, volunteers, NGOs, NCC / NSS, Homeguards and civil defence, district and village bodies be ensured.
- Security arrangement and protection of lives and property.
- Preparation and updating of resource inventories.
- Appropriate welfare measures throughout all stages
- Test exercise of prepared plans and recording of lessons learnt
- Documentation.

### **Stages of Evacuation**

There are five stages of evacuation as under:

- Decision of authorities to evacuate victims
- Issue of warning and awareness
- Ensuring smooth movement of victims to designated relief camps
- Ensuring provision of all requisite facilities like security, safe-housing, feeding, drinking-water, sanitation, medical and allied facilities
- Safe return of personnel on return of normalcy

### **Decision to Evacuate**

Vulnerability analysis may indicate that for certain hazards and under certain conditions, sheltering in place could well be the best protection. Available lead-time may influence the decision to evacuate the public before the impact of emergency (e.g. floods) and reducing the risk to lives and property. Decision would also be dependent on factors like ready availability of suitable accommodation, climatic condition, severity of likely hazard and time of the day.

The Collector would be the authoritative body to issue directions for evacuation. The OIC of DECR would convey directions to Desk Officers of concerned agencies, which are responsible to execute evacuation.

### **Basic consideration for Evacuation**

The DCG will define area to be evacuated as also the probable duration of evacuation on the basis of meteorological observations and intimations by the concerned forecasting agencies. It should also identify number of people for evacuation, destination of evacuees, lead-time available, welfare requirements of evacuees as also identify resources to meet the needs of victims, viz. manpower, transport, supplies equipments, communications and security of the evacuated area.

The evacuating agency should set priorities for evacuation in terms of areas likely to be affected and methodology to execute evacuation:



- Delivery of warning
- Transport arrangement
- Control and timing of movement
- Fulfill welfare needs including medical treatment
- Registration of evacuees

All agencies involved in evacuation operation like Homeguards, Police, PWD, PHED, etc. will coordinate in field. They will remain in touch with the Desk officials in the DECR for issuing warning, information and advise the public.

### **Evacuation Warning**

An evacuation warning must be structured to provide timely and effective information. Factors, which may influence the quality and effectiveness of warning, include time, distance, visual evidence, threat characteristic and sense of urgency e.g. the more immediate the threat, the greater the resilience of people to accept and appropriately react to the warning.

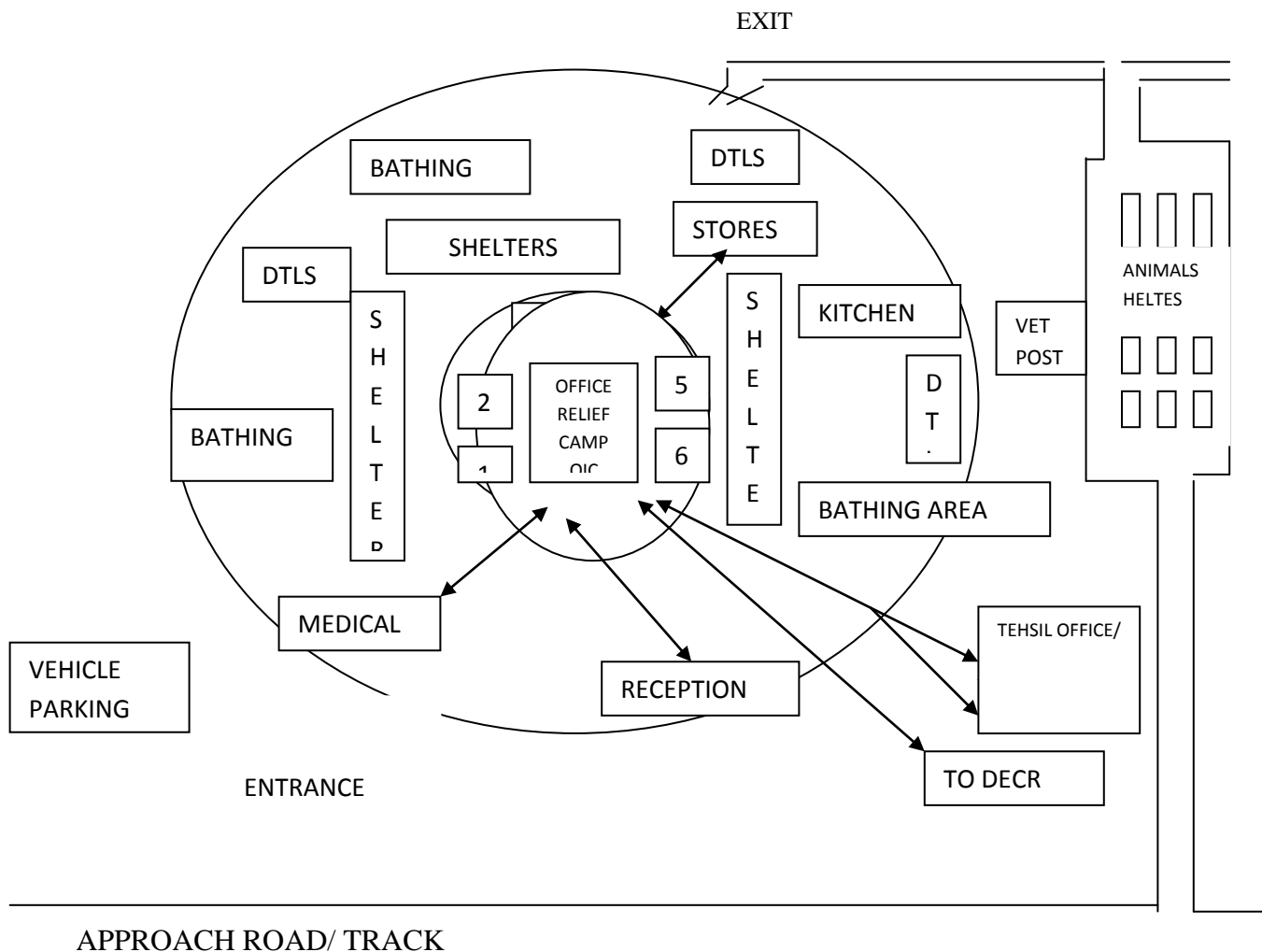
The warning should be clear and target specific. The warning statement issued to the community should be conveyed in a simple language. The statement should mentioned:

- The issuing authority, date and time of issue
- An accurate description of likely hazard and what is expected
- Possible impact on population, area to be in undated or affected due to earthquake
- Need to activate evacuation plan
- Do's and Don'ts to ensure appropriate response
- Advise to the people about further warnings to be issued, if any

### **Movement of Victims to Shelter / Relief Camp**

As a large number of people would be rendered homeless and most of their properties may get destroyed during the flood or earthquake, a number of relief camps would be established to look after the people. RTO will be responsible for mustering adequate transport for movement of victims to shelters / relief camps and also stores and equipments. In order to cater to the needs of the affected people housed in the relief camps, arrangements for food, clothing, drinking water and medicines would be made. The Revenue and the Food Supplies Departments would make provision of food and clothing. Community kitchen should be run with the help of NGOs to provide foods to the victims. Adequate clothing and blankets as per weather conditions should be provided to the victims free of cost. The voluntary agencies can play very important role in this regard and their services should be adequately utilized. All measures will be taken to control outbreak of epidemics. The cleanliness of bathing areas and deep-trenched latrines should be ensured.

**SUGGESTED LAYOUT OF A RELIEF CAMP**



### Evacuation procedure:

Earthquake cannot be predicted, hence warning for evacuation is not possible. In case of flood warning, the need to evacuate the population from low-lying areas should be decided keeping in view the lead-time before an area gets inundated. The District Collector in consultation with the DCG members would decide for evacuation on receipt of flood warning from the concerned forecasting agencies. The Collector would be the authoritative body to issue direction for evacuation. The OIC of DECR would convey the directions to Desk Officers of concerned agencies, which are responsible to execute evacuation.

Basic consideration for evacuation:

- The DCG will define area to be evacuated
- DCG will decide the probable duration of evacuation on the basis of meteorological observations and intimation by the concerned forecasting agencies.
- The evacuating agency should identify number of people for evacuation, destination of evacuees, lead time available, welfare requirements of evacuees.
- Identify resources to meet the needs for evacuation viz. manpower, transport, supplies, equipment, communications and security of the evacuated area.
- The evacuating agency should check availability, capability and durability of the required resources.
- The evacuating agency should set priorities for evacuation in terms of areas likely to be flooded.
- The evacuating agency should decide how to execute evacuation viz.
  - Delivery of warning
  - Transport arrangement
  - Control and timing of movement
  - Fulfill welfare needs
  - Registration of evacuees
- All agencies involved in evacuation operation will coordinate in field.
- Be in touch with the OIC to pass warnings, advice and information to the public. The OIC will convey the message through the District Information Officer / Public Relations Officer.
- Organize movement of evacuees
  - Identify evacuation routes
  - Traffic control
  - Identify officer to control evacuation in field
  - Allocation of responsibilities
  - Communication facility
- Post-evacuation operations will include organize return of evacuees.

#### C.1.2.3 Organizing mock drills

Mock drills are conducted at the state, district/ City, block, Gram Panchayat and Village/Resident Welfare Association/ Schools/ Market Trade Association, etc levels to test the plans prepared for different hazards. It also helps to identify the gaps in the plans prepared, test the skills acquired by various task forces and the response time of the different service providers - both government and non government. the importance of mock drills to prepare the local community to best respond during an emergency, we must put serious thoughts on the potential panic it can cause as everyone involved may not realize the simulation nature of the exercise. these drills ensure better and coordinated response during a disaster by making everyone aware of their role and responsibilities.



In the Indian context, these drills help reinforce the Incident Command System coming up under each State and District Disaster Management Authority and clarify their roles and responsibilities. Mock drills also help in preparing responding agencies determine what resources would be required and help them carry out a capacity assessment. Organizing a mock drill requires detailed planning about the event and role of each stakeholder participating. A "building block approach" to mock drills can be adopted, where drills are planned in a cycle, i.e. each building on the experience of the earlier one preceded by extensive sensitization and preparedness of all stakeholders in partnership with various organizations and community. Mock drills held using this technique help increase the acceptance level and understanding of the community towards such initiatives. Mock drills not only help in testing and building capacities of disaster management teams, but also provide ample scope for identifying areas of improvement.

Some specific recommendations for 'before' and 'during' the drills to ensure "no panic," go as follows:

#### Before the Drill

- Conducting different drills for different emergencies based on the vulnerability so the community can find out gaps in their preparation and response and take the necessary steps
- Making available "do's and don'ts" lists for various emergencies to stakeholders before planning a drill
- Involving the community and using local resources and knowledge, so they are able to relate to the drill process
- Keeping the District Administration, local hospital, fire brigade and police station informed of any planned drill
- Preparing a detailed event chart with time and activities (i.e. information of the event, warning dissemination, place of occurrence, effect/impact of disaster, de-warning and de-briefing)
- Preparing a safety plan before the drill (Route Chart, First Aid box at the site, proper search and rescue equipment/information for any emergency contact number, police, fire, health system, revenue control room, and the skilled manpower immediately available in case of a real emergency)
- Ensuring "manageable" community participation, to prevent a real time disaster

#### During the Drill

- Bringing in the media as part of the mock drill team to disseminate messages on the purpose of the drill
- Monitoring response time, to enable the community to learn how to minimize loss
- Ensuring proper coordination among various stakeholders during the drill
- Having a skilled safety team on standby for any emergency support
- Ensuring proper security arrangements are in place at the mock drill location.

The ownership of the mock drills can be of the home commandant team as they are the people who are well versed with the practicalities of the disasters and the actions that can be taken during such disasters.

## **C 1.3 Response Plan**

### **C 1.3.1 Disaster Emergency Response Force**

The Disaster Management Act, 2005 has made the statutory provisions for the constitution of the National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. According to Section 45 of the Act, the Force has to function under the general superintendence, direction and control of the National Disaster Management Authority (NDMA) and under command and supervision of Director General, NDRF. Though the units of this Force were nominated in 2003, it is only after the establishment of NDMA that their training and equipping were vigorously pursued. In lieu with the Section 44 (i) of the Act that states NDRF a specialist force, the force is gradually emerging as the most visible and vibrant multi-disciplinary, multi-skilled, high-tech force of the NDMA capable of dealing with all types of natural and man-made disasters. At present, National Disaster Response Force (NDRF) is about constituted of eight battalions, two each from the BSF, CRPF, CISF and ITBP. Each battalion will provide 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. The total strength of each battalion is approximately 1,149.

All the eight battalions are being equipped and trained to combat all natural disasters including four battalions in combating nuclear, biological and chemical disasters.

The vision of the National Disaster Management Authority is to build a safer and disaster resilient India by developing a holistic, proactive, multi-disaster and technology driven strategy for Disaster Management. This has to be achieved through a culture of prevention, mitigation and preparedness to generate a prompt and efficient response at the time of disasters. This national vision inter alia, aims at inculcating a culture of preparedness among all stakeholders.[3]

NDRF has been proved its importance in achieving this vision by highly skilled rescue and relief operations, regular and intensive training and re-training, familiarization exercises within the area of responsibility of respective NDRF Bns, carrying out mock drills and joint exercises with the various stakeholders. NDRF has proved its efficacy with its commendable performance during various disasters including the drowning cases, building collapses, landslides, devastating floods and Cyclones.

Training:

In future, the key to efficient disaster response will depend primarily on effectiveness of training and re-training of Specialised Disaster Response Forces. With this vision, a detailed "Training Regime for Disaster Response" has been prepared by NDMA/NDRF identifying the specific disaster response training courses and devising a unified, structured and uniform course module as well as syllabus for these training courses. The proposition behind a unified, structured, uniform course module and syllabus is that first the entire NDRF battalions will successfully attain these courses and subsequently the State Disaster Response Forces (SDRF) and other stakeholders will be trained on the same lines. The need of uniformly structured course module emerged out of the fact that if all the NDRF battalions and other 'first responders' undergo the same training exercise, the coordination between different stakeholders would be expedient and well planned at the time of any major disaster where different NDRF battalions, SDRF battalions and other stakeholders will be working together in close coordination with each other. NDRF personnel are invariably trained in courses like Flood Rescue, Collapsed Structure Search and Rescue, Medical First Responders, Rope Rescue, Nuclear, Biological and Chemical Emergencies; Dignified Disposal of Dead Bodies etc.

## Training of SDRF

While the NDRF is being trained, re-trained and equipped as a specialist force for level three disasters, it is equally important to ensure capacity building of state police personnel who are invariably the first responders in any natural or man-made disasters. To ensure this, a two-pronged strategy is being suggested to the states: firstly, to train state police personnel in the basics of disaster management and secondly, to train at least one battalion equivalent out of their state armed police units as State Disaster Response Force (SDRF) on lines of the NDRF. In addition to police personnel, the SDRFs may be constituted from existing resources of the Fire Services, Home Guards and Civil Defence. NDRF Bns and their training institutions will assist the States/UTs in this effort. The State/ UTs will also be encouraged to set up DM training facilities in their respective Police Training Colleges and include this subject in their basic and in-service courses.

Awareness and preparedness campaigns are key components of proactive approach on Disaster Management. In case of any disaster, the local population is the actual first responder. It may take some time for the district/ state administration to mobilize rescue teams, including police, fire personnel etc. If the local people is properly sensitized about the precautions and preventive actions to be taken in case of any calamity, the loss of life and damage to property can be drastically reduced. Thus, one of the most important tasks of NDRF is to continuously engage themselves in the Community Capacity Building and Public Awareness programmes in a big way which includes training of people (the first responders) and concerned government officials at different levels in the areas with high vulnerability. Along with Community Capacity Building and Public Awareness exercises NDRF is also actively engaged in area familiarization exercises. Such exercises provide first-hand knowledge about the topography, access route to various disaster prone areas, availability of local infrastructure/ logistics which can be used in disaster response operations.

The number of beneficiaries in the state wise training of the community volunteers by NDRF in Madhya Pradesh is 9550. NDRF also conducts regular mock exercises on various disasters like cyclone, flood, earthquake, NBC emergencies, mass causality management etc. Participation in such exercises on the one hand improve the professionalism of NDRF personnel to tackle the real emergency situations and on the other provides an opportunity to interact with various State Government officials and to develop cordial relations with them that can be of great help during response to actual disasters.

### **C 1.3.2 Crisis management direction & coordination**

### **C 1.3.3 Incident Command System (ICS)**

A traditional command structure exists in the administrative hierarchy which manages disasters in India. It has been planned to strengthen and professionalize the same by drawing upon the principles of the ICS with suitable modifications. The ICS is essentially a management system to organize various emergency functions in a standardized manner while responding to any disaster. It will provide for specialist incident management teams with an incident commander and officers trained in different aspects of incident management, such as logistics, operations, etc.

All 5 major command functions in Incident command system are to be followed:

- a) Incident command
- b) Planning section
- c) Operations section



- d) Logistics section
- e) Finance/ Admin section.

**Composition of ICP (Incident Command Post)**

- ICP commander – Appointed by DEOC
- Information officer
- Safety Officer
- Intra-agency coordinator
- Operations officer
- Planning Officer
- Logistics Officer
- Finance Officer
- Operation Teams
- Damage assessment
- Search and Rescue
- Medical Assistance
- Donation mgt
- Relief Camps Team

**C 1.3.4 Rapid damage assessment & reporting**

Rapid Damage Assessment Team to be set up immediately after disaster. It should include Z.P. members, agricultural officer to assess the crop damage, executive engineer of PWD to assess the damaged houses, S.P to maintain the law and order situation, NGOs and volunteer organizations, Tahsildar, etc.

This team may immediately assess the damage undergone due to disaster and report it to the concerned department to get the immediate relief material from the government and also the foreign aid. Damage assessment procedures are required to avoid litigations and delays in gratuitous relief and compensation, including insurance.

Table C 1.3.4 **Initial Assessment Report**

INITIAL ASSESSMENT REPORT										
1	NATURE OF DISASTER:									
2	DATE OF OCCURRENCE:					TIME:				
3	DAMAGE AND LOSS ESTIMATES									
	Name of the Site (Village, Block, Tehsil)	Total Population Affected	People missing	People injured	Severity		Immediate needs	Houses Damaged		Action taken
					H	L		L	M	
4	INFRASTRUCTURE DAMAGE									
	Name of the Site (Village, Block, Tehsil)	Housing	Agriculture	Animals	Water source	Road and bridge	Power	Communication	Govt. Building	Others
5	NEED ESTIMATES									
	Name of the Site (Village, Block Tehsil)	Medical Needs	Population requiring shelter		Clothes	Food	Water	Sanitation	Any Other	
6	ANY OTHER VITAL INFORMATION									
7	SPECIFY IMMEDIATE NEEDS: (With quantity)									
	Food									
	First aid									
	Machinery									
8	Possible Secondary Affects:									
9	NAME THE CONTACT PERSON:									
10	AGENCY/ADDRESS: TELEPHONE NUMBER									
	DATE:				SIGNATURE:					
	FOR OFFICE PURPOSE:				REPORT NO.:					
	ACTION TAKEN:									

### **C 1.3.5 Distt. Search & rescue Team**

Prompt assistance at the disaster site often requires arrangement of power supply at the disaster site for lighting arrangements to facilitate search and rescue often in the night. It will be the responsibility of MPEB to make this arrangement at the disaster site. Search and rescue is the key response function required for limiting casualties in most disasters, Homeguards will provide the trained organized force for search and rescue functions which will be augmented by utilizing the services of local volunteers trained by the district administration in search & rescue operations. PWD will facilitate the search operations of Homeguards by performing debris removal operations. Homeguards will also be trained in motor boat driving which will be required during flood situations.

Provided in the annexure.

### **C 1.3.6 Medical response( Under the process of making)**

The specialized medical care shall be required to help the affected population. The preventive medication may have to be taken to prevent the outbreak of diseases.

Further, at the district level, dedicated medical teams will be activated at the time of emergency, which will consist of the doctors, nurses, pathologists, etc. Mobile Medical Vans, equipped with emergency requirements, also to be identified.

Members of the medical emergency team to be well trained, retrained on triage, advance life support, well versed with golden hour-platinum minutes concept, quick steps of first aid response etc.

Medical relief:

Victims of many disasters require medical care on priority. Similarly, special efforts are required to prevent outbreak of epidemics in many emergency situations. The health and medical services include emergency medical service, hospital services, public health, environmental health, and mortuary services. The activities associated with these services include treatment, transport, and evacuation of the injured, disposition of the dead, and disease control activities related to sanitation, preventing contamination of water and food supplies, etc.. During response operations and in the aftermath of a disaster, public health & family welfare (PHFWD) Department will be the responsible agency for providing public health and medical service.

### **C 1.3.7 Logistic arrangements (RTO info about fit vehicles in annexure)**

For an effective response from the relief team proper arrangements of the logistics are must. During the response phase, lots of resources are mobilized in terms of manpower, equipments and material. The relief workers and officials from outside the disaster area require transport, accommodation, food, etc. so that they can effectively perform the relief operations. Lot of equipment and materials have to be transported to the disaster site. All this requires logistic arrangements and coordination with different agencies.

In situation like Earthquake or Super Cyclone, the local transport infrastructure get crippled and immobilized. In such a situation, the local administration will try to mobilize the transport from outside. The drivers, cleaners and loaders etc. are required to work overtime and need proper care from the administration in terms of food, a place to park the vehicle and take rest. The team



responsible for transport arrangement will try to take care of these basic requirements of the transport fleet. For running the transport fleet, petrol and diesel will be required and for this, appropriate arrangements will have to be made with the assistance of local oil companies, and dealers.

In a situation like Earthquake or Super Cyclone, the local infrastructure, which can be depended for arranging food, gets damaged. In such situation one needs to look for NGOs and caterers, who can organize emergency food on a really big scale. Such agencies needs to be identified in advance and requested during the emergency to organize the emergency food for relief teams and disaster victims. The relief officials and the disaster victims require food, even during the response phase. It will be the responsibility of the Food and Civil Supplies Department to arrange the food for the relief teams and disaster victims. The food can be provided to the relief teams and disaster victims, using the assistance of the local volunteers or the relief agencies themselves.

### **C 1.3.8      Communications**

#### Communication Mechanism

On the basis of reports from the possible disaster site, or on the warning from the agencies competent to issue such a warning, or on the receipt of warning or alert from Emergency Operations Center, the Collector will exercise the powers and responsibilities of the District Disaster Manager.

The list of the agencies competent for issuing warning or alert is given below:

The warning or occurrence of disaster will be communicated to

- ◆ Chief Secretary, Relief Commissioner, Emergency Operation Center
- ◆ Office of Divisional Commissioner
- ◆ All district level officials, Municipal Councils
- ◆ The Officials of central government located within the district
- ◆ Non-officials viz; Guardian Minister of the district, Mayor, ZP President, MPs, Local units of the Defense Services.

#### **Communications and Information Technology (IT) Support**

The basic communications and IT support requirements for disaster management correspond to the following three levels:

- Decision makers and disaster managers at all levels.
- Real time dissemination of advance warnings and information to the concerned authorities at various levels and threatened community. For dissemination of advance warning and information through broadcasting mediums such as television and radio shall be used significantly as it has higher geographical reach.

- Last mile connectivity at the disaster site for control and conduct of rescue and relief operations.

Communication and sharing of upto-date information using state-of the art IT infrastructure remain at the heart of effective implementation of the disaster management strategy. Reliable, up-to-date and faster sharing of geo-spatial information acquired from the field or the affected areas is a pre-requisite for effective implementation of disaster management strategies. Efforts should be made for setting up IT infrastructures consisting of required IT processes, architecture and skills for quick up-gradation and updation of data sets from the Panchayati Raj Institutions or the Urban Local Bodies. A National Emergency Communication Network, involving the contemporary space and terrestrial-based technologies in a highly synergistic configuration and with considerable redundancy, will be developed. This Network will ensure real time dissemination of warnings and information up to the affected community and local authorities.

### **C 1.3.9 Temporary shelter management**

A serious earthquake results in substantial damage to buildings and other structures. Thus, there can be sudden shrinkage of housing stock after the earthquake. Therefore, large number of people may require temporary shelters for a few weeks before they can reconstruct their houses. Accordingly, this plan has identified requirement of temporary shelter facility for large number of people for a few weeks.

Floods in Dewas district have resulted in temporary submergence of houses. It is estimated that the flood prone villages of the district are not likely to experience sudden shrinkage of housing stock requiring temporary shelter facilities on a substantial scale. The families, which may lose their houses due to flood, can manage temporary shelter facility with their relatives and friends.

**Table C 1.3.9**  
**( list of temporary shelters provided in the annexure).**

### **C 1.3.10 Water and Sanitation (WATSAN)**

#### **Preparedness and mitigation:**

- Identify flood affected areas, evacuation centre
- Awareness raising of the community
- Capacity building of government officials, NGO staff, health volunteers
- Link with development program

#### **Response : Assessment**

- Get information from waterworks and sewerage authority about what support is needed to supply safe water.
- Conduct water test for chlorine and faecal coliform sample out from the tap.
- Interview different stakeholders and affected women, men and children what they know

#### **Response**

- Support waterworks as need and appropriate, such as providing tanks to perform sedimentation, chlorination, storage and distribution.
- Install organisation or local tanks in different strategic location for treatment and distribution operating by trained local or govt. staffs.
- Tanks and pumps for water trucking from an unaffected water source.

- Trained volunteers/technicians to conduct necessary centralized or household treatment followed up by surveillance.
- Provide means of water collection, uses and if necessary for household treatment. i.e bucket, cup, etc

#### **Response**

- Quick survey to identify priority water sources that can provide fairly coverage to the affected people.
- Rapid cleaning and disinfecting program for affected water sources like well and handpumps using community volunteers by phase.
- Dewatering water from community ponds or essential water bodies that use for washing and cleaning utensils.
- Distribution of household water treatment materials and instruction. – could include household water filter and information for safe use
- Distribute safe water among the stranded community and means to store and use.
- Dissemination of messages of what is safe water and where and how to obtain it.

#### **Excreta disposal in urban and displaced centers**

- Support municipal or camp authority to empty existing septic tanks and dig additional pit to accommodate additional excreta.
- Provide additional temporary latrine if water is receded and feasible.

#### **Management of latrine**

- If ground floor flooded, provide excreta containment latrine so shit will not drift around.
- Provide adequate privacy for women with plastic sheet or local materials such as mat, shacks, etc so.
- Maintain latrines by paid worker if community unable to keep it clean and useable

#### **Solid waste disposal and drainage in urban and displaced centers.**

- Technical support to the local authority, municipal, etc and integrate works with govt efforts if there are any.
- Provide rubbish container or garbage hole to the displaced centers and ensure people using them properly.
- If the floodwater remains, provide rubbish containment made of local or readymade materials.
- Provision of hiring rubbish truck, or fuel for municipal truck to collect and dispose solid waste in a designated dumping area.
- Special programme to dispose corpses and carcasses

#### **Village waste disposal and drainage**

- Organise community and provide tools to conduct a mass cleansing campaign. Use cash or food for work (relief materials) if necessary.
- Encourage people for safe defecation and household waste disposal.

### **C 1.3.11 Law & order**

Recent experiences of disaster management in Dewas show that law and order in the affected area is a must to be maintained properly and should be given priority in the scheme of things. It shall be the responsibility of the police to maintain the same. In case of the disaster being one of a high magnitude, the district administration shall seek the help of the army for maintaining the law and order.



### **C 1.3.12 Public grievances/missing persons search/media management**

Media is an important source of information for the general public, especially in a disaster situation. Even the Government officials get a lot of useful information about the field situation from the media reports. Since the disaster management involves fast communication of information to the community relating to warning of a likely event and the arrangements for emergency response. The administration must utilize the local media resources for communicating with the local community. In a disaster situation, not only the people directly affected but their relatives and friends are also anxious to know about the welfare of their acquaintances. In such a situation, the media is able to inform the people about the welfare of the people. This plan has recognized the power of the media in keeping the people and the administration informed and seeks to utilize the media for the following purposes:

- The nature of the likely hazards, which may affect the lives of the people of the district and the ways to protect their lives and properties from the hazard;
- Increasing community awareness about the mitigation measures that can protect the lives and properties from the hazards;
- Communicating an advance warning of impending disaster to the people in order to give them time to take any protective action required;
- Identity of the people affected by the disaster and the nature of the effect;
- Arrangements made by the administration for the relief to disaster victims;
- Raising the awareness of the community to include mitigating measures for the recovery process;
- Keeping a watch over the relief operations and to keep the Government and the people informed about the same.

Thus, this plan provides for using the reach of the media with the people through all the four phases of disaster management. In Madhya Pradesh, District Collector interacts with the media through Public Relations Officer. The same arrangement will work even in relation to disaster management. In the absence of the Collector, Officer-in-charge of DECR will issue the press release through PRO.

There are certain cares and measures that must be taken while dealing with the media:

#### **Principles of media**

- The media should be managed rather than controlled
- Cooperation with the media is preferable to confrontation.
- Avoid public disputes within your organization / agency and with others.
- The media is a communication medium to, and between, parts of the community.
- They can help to control convergence and rumor.
- They can list victim entitlements and promote self-help principles

#### **How can media help :**

- Provide information to disaster affected people about the nature of common reactions and the services / assistance available
- Educate the wider community about the experiences and needs of the affected people
- Provide feedback to the affected community about the support available from the remainder of the community.
- Provide opportunities for reflection, evaluation, comparison etc through talkback and anecdotes.

### Media management:

- Talk to the interviewer (not to camera)
- Talk in short, simple chunks of information. One thought per sentence.
- Keep to the facts - avoid grey areas.
- If you are unclear then say so.
- Relate to your audience.
- Be prepared - have a statement ready.
- Stick to the facts - do not be led into “hypotheticals”
- If you promise to come back with more information then do so
- Never push the media away or lose your composure
- Never say something “off the record”.
- Avoid “NO COMMENT”.
- Material will be edited. Avoid dependent sentences.
- Avoid YES or NO answers.
- Change negatives into positives.
- Adjectives aren’t really necessary.
- In a media release get the key points in first.
- Approximate large numbers.

#### C 1.3.13 Animal care

During an earthquake and flood, not only the human beings but also the domestic cattle / animals are also affected and need to be taken care of simultaneously. The Animal Husbandry Department will organize special animal relief camps in coordination with Revenue Department, Nagar Nigam and allied support work services. The following services will be provided in the camps:

- To provide shelter to the affected animals by erecting temporary sheds
- To provide feed, fodder and potable drinking water
- Treatment of injured and sick animals by establishing a Veterinary Treatment Post to ensure effective treatment of animals
- List of animals would be prepared with details of their owners and distinguished marking will be made
- Arrangement for proper disposal of animals excreta
- Disposal of carcasses from the affected area shall be done immediately
- To prepare a list of dead animals
- Arrangements for grazing and milking of cows will be undertaken as per existing regulations
- To provide adequate veterinary cover, mobile and static hospitals will be established
- Pre monsoon vaccinations can be administered to prevent diseases and hence outbreak of epidemics.

#### C 1.3.14 Management of deceased

When the toll on animal life takes place at a small scale, the localites themselves carry the carcasses and dump them in a common place and sprinkle salt to disinfect it and ensure that infection is not spread. The place of dumping is usually at a site which is a bit far from the habitation so that even the bad odor doesn’t get strong for the people when the decomposition takes place.

But when the animals die in a larger scale, the carcass disposal team comes into picture. They with the help of JCBs remove the carcasses and dump them in a common dug trench or pit and sprinkle salt to disinfect them. It is recommended that carcass disposal teams should be made and maintained so as to ensure a professional way of clearing up of animal dead bodies.

### **C 1.3.15 Civil Defense and Home Guards**

The Civil Defense and the Home Guards will be deployed for emergency response, community preparedness and public awareness. At district level, a culture of voluntary reporting to duty stations in the event of any disasters will be promoted.

### **C 1.3.16 Role of Private Security**

During a natural (or manmade) disaster, surely the sheer number of private security personnel would provide significant improvements to resource availability and resource management. They don't actually need to play a role within the most important tasks which are clearly appropriate for police, and other emergency services personnel.

A theoretical use for this would be a major disaster, perhaps even riots where Police are not capable of handling the demand for public safety and security in the short term. Local security firms could be mobilized on short notice, placed under the command of police in the chain, and handle less important tasks that none the less demand manpower, while police can apply their skills to more crucial areas.

The value of the training and experience of private security personnel is quite high in this situation, and the command chain being clearly in favor of the police provides less reason for confusion. In the long term the theoretical examples' private security personnel would be able to be phased out as manpower increases.

The only real barrier to this is communication infrastructure and training from both government and private security staff in mobilizing in such a situation. Having an extra hundred or so, or possibly thousand or so, personnel on hand in the crucial moments as a massive disaster unfolds could surely help save lives and provide a basis for a long term partnership.

### **C 1.3.17 NGOs & Voluntary organizations**

The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.



NGOs and CBOs have responded promptly and effectively in most of the emergencies both during the immediate response and in the recovery phases. Even the NGOs located far away from the disaster affected area have rushed their relief teams in. There is a need to coordinate the activities of a large number of NGOs and CBOs. This will be achieved by designating one of the local NGOs as the coordinator for activities and relief materials being arranged by other NGOs. The designated local NGO will provide the interface between the large number of NGOs and the district administration.

**(list of NGOs) ( provided in annexure)**

### **C 1.3.18 Relief management planning**

#### **Responsibilities and functions of Infrastructure desk**

- Organize and coordinate clearance of debris
- Temporary Repairs to damaged infrastructure

This would be the responsibility of the vital services desks viz. PWD, Public Health & Engineering Department (PHED), Water Resource Department, Narmada Valley Development Department (NVDD) and works department of Municipal Corporation. The Desk Officers would be the nodal officer incharge to coordinate and monitor the restoration activities done by their respective departments.

- Power
- Water
- Transport
- Telecommunication
- Roads
- Bridges
- Canals
- Public buildings

#### **Construction of facilities**

- Shelters with sanitation and recreation facilities as per the standards
- Provision of hand-pumps and borewells
- Temporary structures for storage
- Educational facilities
- Medical facilities
- Postal facility
- Helipads

#### **Responsibilities and functions of health desk**

A. Organize and maintain records on

Coordination and monitoring of these activities would be the responsibility of health desk headed by Chief Medical Officer (CMO).

- Treatment of the injured and sick
- Disposal of dead bodies
- Disposal of carcasses

- Preventive medicine and anti-epidemic actions
- Reports on food, water supplies, sanitation and disposal of waste

B. Assess, supply and supervise

- Medical relief for the injured
- Number of ambulances required and hospitals where they could be sent, (public and private);
- Medical equipment and medicines required
- Special information required regarding treatment as for epidemics etc.

C. Supervision of maintenance of standards

- Identification of source for supply of drinking water through tankers and other means of transport
- Transit and relief camps for cooking arrangements, sanitation, water supply, disposal of waste, water stagnation and health services.
- Communities for storage of rations, sanitation, water supply, disposal of waste, water stagnation and health services.
- Standards in cattle camps with arrangements for water, fodder disposal of solid waste, veterinary services.

**Responsibilities and functions of logistics desk**

A. General

The Additional District Magistrate (ADM) would be the incharge of logistics desk. However, the activities mentioned below would also require assistance of police desk. It is proposed that the logistics and police desks work in close coordination for efficient execution of activities in the field.

- Assessment of reinforcement needs including manpower and deployment of resources as per information
- Requirement, availability and location of depots, and transportation of wood to the locations for mass cremation
- Identification of location where mass cremation/burial can be carried out and Manpower and transport that would be required for this work;
- Identification of location where carcasses can be disposed of and Manpower and transport that would be required for this work;
- Requesting for additional resources from other district / divisional headquarters / EOC. Arrangements with petrol pumps for supply of fuel for authorized relief vehicles against credit coupons
- Coordinating and supervising issuing of Village relief tickets to affected families
- Ensuring safe storage, and transport of relief Supplies
- Coordinate supplies distributed directly by NGOs and other organisations including private donors
- Ensure proper maintenance of vehicles and equipment

B. Coordination of Transport - with

- Railways
- MSRTC
- Private transporters

- Boat Operators
- State Government Aircraft
- State Government Helicopters

#### C. Organizing Transport for

- Rescue parties
- Relief Personnel
- Marooned persons
- Water, medicines, first aid and cooked food for marooned persons and Volunteers
- Relief Materials
- Seriously injured and Sick.

#### **C 1.3.19 Media Management**

Media is an important source of information for the general public, especially in a disaster situation. Even the Government officials get a lot of useful information about the field situation from the media reports. Since the disaster management involves fast communication of information to the community relating to warning of a likely event and the arrangements for emergency response. The administration must utilize the local media resources for communicating with the local community. In a disaster situation, not only the people directly affected but their relatives and friends are also anxious to know about the welfare of their acquaintances. In such a situation, the media is able to inform the people about the welfare of the people. This plan has recognized the power of the media in keeping the people and the administration informed and seeks to utilize the media for the following purposes:

- The nature of the likely hazards, which may affect the lives of the people of the district and the ways to protect their lives and properties from the hazard;
- Increasing community awareness about the mitigation measures that can protect the lives and properties from the hazards;
- Communicating an advance warning of impending disaster to the people in order to give them time to take any protective action required;
- Identity of the people affected by the disaster and the nature of the effect;
- Arrangements made by the administration for the relief to disaster victims;
- Raising the awareness of the community to include mitigating measures for the recovery process;
- Keeping a watch over the relief operations and to keep the Government and the people informed about the same.

Thus, this plan provides for using the reach of the media with the people through all the four phases of disaster management. In Madhya Pradesh, District Collector interacts with the media through Public Relations Officer. The same arrangement will work even in relation to disaster management. In the absence of the Collector, Officer-in-charge of DECR will issue the press release through PRO.

Communication with media will require skilled liaison and a system for the authorized release of current information. Planning should include identification of any agency media responsibilities in accordance with the District / State arrangements. A media strategy should be developed and be in place, prior to activation of evacuation plans. An officer-in-charge, Public Relations functioning in the DECR will be made responsible for briefing the media everyday once in the morning and evening. The media can play a very responsible role in respect of the following:



- Information and awareness
- Dissemination of warning
- Preparing community to compact disasters
- Do's and Don'ts and action to be taken by the community in case of evacuation
- Emergency measures in case of floods and earthquake including landuse planning
- Rescue and relief plan of the Government
- Location of relief camps, modes of transportation provided by the State, approach routes, arrangements for live stocks, provision of facilities in the relief camps and security arrangements.

### **C 1.3.20 Fire Services**

The fire services are called as the fourth line of National defense. The Govt. of India has nomenclature the fire services as “Fire & Emergency Services” and designated as the first responders in case of any emergency. As per the National Disaster Management Act 2005, which is adopted by various states, the strengthening of fire services is under taken by many states so that they can respond to any Manmade or Natural Disaster. The main role of fire service is divided into two parts one is Fire Prevention and another is Fire Protection. The Fire Prevention is achieved by implementing fire prevention engineering at the planning stage of any building. This includes the selection of plot or location of building, approach roads for the plot, surrounding activities of the plot to limit the exposure hazards. Then building planning such as type of occupancy, fire rating of construction, travel distance, occupant load, number of exits, refuge area, width of passages and staircases, pressurization of lifts, Lift lobbies and staircases, use of material for carrying out interiors of the building, fire doors, fire dampers in artificial ventilation, natural cut out for ventilation etc. The Fire Protection comprise alerting the management and occupant of the building also it will helps to fight the fire before arrival of fire service. This includes smoke detection, fire alarm system, fire extinguishers, hose reel hoses, fire hydrant system, sprinkler systems, flooding System, dedicated underground water storage tanks for fire service and terrace level fire tanks with pumping arrangements. The mock drill or fire drill is also important exercise which plays vital role in safe evacuation of occupants in case of emergency. These methods will help to minimize loss of precious human life and salvaging National Property.

### **C 1.4 Recovery and Reconstruction Plan**

Recovery is the final phase of the emergency management cycle. Recovery continues until all systems return to normal, or near normal. Short-term recovery returns vital life support systems to minimum operating standards. Long-term recovery from a disaster may go on for years until the entire disaster area is completely redeveloped, either as it was in the past or for entirely new purposes that are less disaster-prone.

Recovery Phase may involve one or more of the following components:

- Restoration of the basic infrastructure
- Reconstruction / repairs of community facilities/social infrastructure
- Reconstruction / repairs of the private residential buildings
- Restoration of private business enterprises including farming activities
- Medical rehabilitation of the people physically affected by the disaster
- Psychological rehabilitation of the families who have lost near and dear ones

The operational direction and coordination of recovery efforts is much simpler in comparison with the problem of operational direction and coordination of response functions. Therefore, it is presumed that the normal arrangements for coordination in the district will take care of requirements of operational direction and coordination of recovery efforts. However, it is proposed that a Committee chaired by the District Collector be set up for the coordination of all the restoration and rehabilitation related activities. The Committee should have members like the Deputy Director, Panchayat and Social Welfare, Lead Bank Officer, District Women and Child Development Officer, GM, Industries, District Manager, NABARD, Deputy Director, Agriculture, the General Manager, Industries, one or more than one identified NGOs, the CEO, Zila Panchayat, the Public Works Department, E.E. industry and business organization's representatives and other interested eminent persons in the area of disaster management.

The basic infrastructure departments will do a quick damage assessment exercise in respect of the infrastructure facilities under their charge immediately after the disaster and submit a report to the Government and the Collector. These departments will initiate action for restoration of the damaged infrastructure facilities using departmental funds.

They can submit demands to Government for additional funds or relaxation of departmental regulations for speeding up restoration efforts.

Funds are generally available from the Rural Development Department for the construction and maintenance of community facilities in the rural areas. These funds will be utilized by the Panchayats for reconstruction or repairs of the damaged community facilities. They can also submit demands to the Government for additional funds or relaxation of departmental regulations for speeding up reconstruction and repair efforts.

They will also try to mobilize additional funds for this purpose through donations from the local community or donor agencies. The Collector will coordinate the mobilization of funds from the agencies.

Insurance schemes are an important source of funds for reconstruction and repairs of private residential buildings damaged from the disaster. The community needs to be motivated through community awareness programmes to insure their properties. HUDCO and commercial banks also provide financial assistance for reconstruction and major repairs of private residential buildings damaged from disasters. The house owners will be motivated to obtain financial assistance from commercial banks for this purpose.

NGOs and donor agencies also provide financial assistance for reconstruction / repair of private houses, particularly to the poor families, who cannot afford to avail financial assistance from commercial banks at normal terms. The Collector will coordinate with NGOs and donor agencies to ensure that the concessional assistance gets targeted to the really poor and needy families.

Housing Board in collaboration with PWD, RES will organize technology demonstration camps in the affected areas to inform the people about seismically appropriate building techniques so that new constructions are not vulnerable to the identified hazards.

Insurance schemes are important source of funds for restoration of private business enterprises. The Collector will coordinate with Insurance Companies to speed up settlement of insurance claims. It will help in restoration of private business enterprises. He will also coordinate with commercial banks for ensuring smooth flow of financial assistance from commercial banks for restoration of private business enterprises.

Revenue, Book Circulars contains standing instructions of the Government for distribution of ex-gratia payments to poor families, who suffer from disasters to initiate their recovery process. This assistance will be provided very promptly to the poor families by the functionaries of the Revenue Department.

#### **C 1.4.1 Restoration of basic infrastructure**

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Housing Board in collaboration with PWD, RES will organize technology demonstration camps in the affected areas to inform the people about seismically appropriate building techniques so that new constructions are not vulnerable to the identified hazards.

#### **C 1.4.2 Reconstruction of damaged buildings/social infrastructure**

Funds are generally available from the Rural Development Department for the construction and maintenance of community facilities in the rural areas. These funds will be utilized by the Panchayats for reconstruction or repairs of the damaged community facilities. They can also submit demands to the Government for additional funds or relaxation of departmental regulations for speeding up reconstruction and repair efforts.

It shall be the responsibility of the local-self-government to reconstruct the community facilities. They will also try to mobilize additional funds for this purpose through donations from the local community or donor agencies. The Collector will coordinate the mobilization of funds from the agencies.

#### **C 1.4.3 Restoration of livelihoods( Refer RBC )**

#### **Medical Rehabilitation**

In case of earthquake, the injury may be reported in terms of amputation of organs and bone fractures, which requires months to be normal. In that case, it is the responsibility of Health Department to take care of injured. For the handicapped, the State Government's Social Welfare and Women and Child Welfare Department provide funds for getting them functional.



#### **C 1.4.4 Psycho-social interventions**

The need of psychological Rehabilitation is important aspect of recovery management. The women who are widowed and children, who get orphaned, require psychological treatment to restart their normal life. This process is very gradual and requires patience. The local volunteers and non-government organizations will organize camps on regular basis for such rehabilitation. Apart from this, Social Welfare Department will conduct psychotherapy sessions on regular basis. The Social Welfare department with the help of the NGOs and other professional bodies shall establish counselling centres for the psychological rehabilitation of the persons affected by the disasters. These centres shall work on similar lines of family counselling centres, which are being run under the Central Social Welfare Board.

The district administration shall accord priority for the recovery and rehabilitation of the weaker sections of the society like the Scheduled Castes and Scheduled Tribes as they normally take more time and efforts to recover from the disasters because of the economic and sociological reasons.

#### **C 1.5 Cross cutting elements**

##### **C 1.5.1 Community Based Disaster Management**

Communities are always the first responders and hence the initiatives pertaining to Community participation, promote local ownership, address local needs, and promote volunteerism, will be captured. The district level plan will be prepared, by incorporating the information, needs and local vulnerability, keeping in view the community participation at the sub district level.

Communities are always the first responders and hence the initiatives pertaining to Community participation, promote local ownership, address local needs, and promote volunteerism, will be captured. The district level plan will be prepared, by incorporating the information, needs and local vulnerability, keeping in view the community participation at the sub district level.

The role and importance of community, under the leadership of the local authorities, Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs), being the bedrock of the process of disaster response, is well recognised. For their immediate support, there are other important first responders like the police, State Disaster Response Force (SDRFs), Fire and Medical Services. The NDRF will provide specialist response training whenever required. In serious situations, the resources of all NDRF battalions (18 teams per battalion), on an as required basis, will be concentrated in the shortest possible time in the disaster affected areas. Other important responders will be the Civil Defence, Home Guards and youth organizations such as NCC, NSS and NYKS. The deployment of the armed forces will also be organized on as required basis. Establishment/raising of NDRF should progressively reduce deployment of the Armed Forces. However, Armed Forces would be deployed only when the situation is beyond the coping capacity of State Government and NDRF.

##### **C 1.5.2 Needs of the Special vulnerability Groups**

In preparedness plan, vaccinations for children and pregnant women should be given so that they are immune to any kind of epidemics that might break out after the disaster.

Special workforce should be trained to help old people evacuate their homes after the disaster. Awareness and sensitization among the men of the community should be done to evacuate the old

people, disabled and women and children first and then evacuate themselves. First aid must be catered to the vulnerable groups and then to the others. Special Medical equipments required by the disabled people should be kept at disposal when and where required.

. In rural areas, where Community Based Rehabilitation (CBR) committees and other local based community organizations may be in place, disaster preparedness should be conceptualized and implemented with the involvement of all community members. Their participation is crucial to ensure equal access to disaster evacuation and relief. As a result, vulnerable groups and their specific needs are clearly identified while measures and facilities are adjusted to incorporate such needs. Basic needs of vulnerable populations should be seen as the equivalent of the general population's; however, there may be different requirements in fulfilling their needs. evaluation and monitoring of the inclusion of vulnerable groups in preparedness should be also part of planning. Since all disasters are local, starting locally is always the best plan. Developing a bottom up approach to planning was the most accepted suggestion.

Key points for disaster planning for vulnerable population, especially people with disabilities include:

1. equal access to shelter facilities
2. equal access to evacuation/ transportation
3. equal access to disaster clean up

Restrictive policies should be reviewed and provisions made that would enable patients to more easily access medicine in cases of emergencies. For relatively isolated communities, private sector involvement in response planning is critical. For example, fuel, food, and transportation are often supplied by the private sector. Consequently, there is a need to raise awareness of the local community and in particular the private sector on the specialized needs of people with disabilities and other vulnerable groups in situation of natural disasters.

Regarding the cost of including vulnerable groups into planning this process does not have to be costly for either national or local stakeholders, but instead requires planners to redistribute existing funds. people with disabilities and other vulnerable populations must develop their own emergency plans as well as establish support groups at the community level.

With regard to specific training on the inclusion of people with disabilities and other vulnerable population in emergency planning, a twin track approach can be adopted i.e training vulnerable populations is as important as training emergency planners and responders from governmental and other agencies. providing training in accessible format for people with disabilities and other populations. This consideration includes materials in Braille, audio versions, large print, use of sign language interpreters, plain language, etc. The need of delivering trainings in facilities that are physically accessible was also mentioned. In addition, people with auditory disabilities should be trained and, at the same time, encouraged to become volunteers, so they can help their deaf communities when interpretation is not available.

Emergency-preparedness drills should include real participation of people with disabilities and other vulnerable groups. Simulations or role play exercises where persons without disabilities take the role of disabled people should be avoided persons with disabilities and other vulnerable groups need to be accommodated first not last.

. There is a need to raise awareness of the general population of the trauma of people with disabilities caused by the lack of inclusion in initial planning.

The development of an end-to-end early warning system is fundamental to save lives when disasters occur. Developing and maintaining all feasible channels of open communication within and across vulnerable groups. The inclusion of satellite and ordinary mobile phones was necessary. The warning system should be accessible for people with disabilities and other groups, especially people who are deaf and blind.

cell phones help inform relevant authorities, groups, neighbors, friends and relatives of the status people with disabilities in emergency situations. It was recognized that due to power outages the life of batteries are often short and therefore limit the usefulness of cell phones to the initial stages of the disaster.

We can establish a 24-hour hotline for disabled people to call the local government councils. Dissemination of information on locations of potential assistance and bringing awareness to the procedures that one should follow in the case of emergency since many people with disabilities are not aware of the available resources or plans can be done.

### **C 1.5.3 Addressing climate induced anthropogenic issues**

Climate change has resulted in the increase in frequency and intensity of many natural disasters and induced anthropogenic effects and hence priority will be given to promote understanding of climate change adaptation strategies, energy efficiency and natural conservation for the mitigation.

Because of the change in climatic dynamics due to Global warming, etc the demarcation of seasons is not proper and rainy season which should have started from 15th of June, is starting from June 1st itself. Because of this the flood preparedness should change with respect to the change of this climatic change.

The changing monsoon pattern and intensity of rains should bring in resistant varieties of crops which can withstand these changes. Awareness regarding these crops should be brought in farmer community.

Since some disasters like hailstorms cannot be predicted, crop insurance should be ensured for all the farmers.



## C 2 Standard Operating Procedures (and Checklists)

Standard Operating Procedures will be prepared with objective of making the concerned agencies / persons understand their duties and responsibilities regarding disaster management at all levels. All concerned departments, divisions and agencies shall prepare their own action plans in respect of their responsibilities. Emergency response teams will be kept ready by each department so that they can move to disaster site/affected area on short notice.

Standard Operating Procedures will be modified and improved upon in light of changing circumstances. The District Magistrate will encourage all the departments to suggest changes in these procedures with a view to enhance the effectiveness of the District Emergency Management Plan

The Standard operating procedure shall be followed during normal times (Non Disaster Stage), warning stage (Before Disaster Stage), disaster stage (During Disaster Stage) and post disaster stage (After Disaster Stage).

- **Non Disaster Stage– Mitigation:** To identify the existing and potential risks and to reduce potential casualties and damage from disasters.
- **Before Disaster Stage– Preparedness:** To build the capacities of local communities in order to safeguard their lives and assets by taking appropriate action in the face of any disaster and to ensure response agencies are able to reach out to potential damage zones in a prompt and coordinated manner.
- **During Disaster Stage-Response:** To attend the immediate need of the affected population in the minimum time possible.
- **After Disaster Stage- Recovery and Rehabilitation:** To build back better.

## Department of Revenue and Relief

<b>Non Disaster Time</b>
<ul style="list-style-type: none"><li>• To appoint a nodal officer in the DEOC.</li><li>• Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated.</li><li>• Train personnel on operations of DEOC.</li><li>• Ensure basic facilities for personnel who will work at district level for disaster response.</li><li>• To coordinate the preparedness functions of all line departments.</li><li>• Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.</li><li>• Ensure that all the Gram Panchayats, urban bodies and blocks prepare their disaster management plan.</li><li>• Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronise the same with the district disaster management plan.</li><li>• Help District Administrators with additional resources for disaster preparedness, if necessary.</li><li>• On annual basis report to the SEC of the preparedness activities.</li><li>• To ensure that funds are being allocated under the District Disaster Mitigation Fund.</li><li>• To ensure that structural and non-structural mitigation measures are taken by all its department offices.</li></ul>
<b>Warning Time</b>
<ul style="list-style-type: none"><li>• Maintain contact with forecasting agencies and gather all possible information regarding the alert.</li><li>• Ensure activation of District EOC in standby mode.</li><li>• Instruct all ESFs remain in readiness for responding to the emergency.</li><li>• Advise concerned District collectors to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice.</li><li>• Dispatch field assessment teams, if required.</li><li>• Provide assessment report to the DDMA.</li></ul>
<b>During Disaster</b>
<ul style="list-style-type: none"><li>• Activate DEOC in full form.</li><li>• To coordinate and plan all activities with the ESFs.</li><li>• Conduct Rapid Assessment and launch Quick Response.</li><li>• Conduct survey in affected areas and assess requirements of relief.</li><li>• Distribute emergency relief material to affected population.</li><li>• Coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters.</li><li>• Coordinate NGO, INGO and international agencies interventions/support.</li></ul>
<b>After Disaster</b>

- Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required.
- Keep the DDMA informed of the situation.
- Ensure supply of food, drinking water, medical supplies and other emergency items to the affected population.
- Visit and coordinate the implement of various rehabilitation programmes.
- Coordinate the activities of NGOs in relief and rehabilitation programmes.
- Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage

**Department of Home**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Vulnerability map of the block / Tehsil</li> <li>• Resource Inventory, Capacity analysis.</li> <li>• List of cut off areas with safe route map for communication.</li> <li>• Formulation/ Updation of Disaster Plan for the District.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Warning Time</b></li> </ul>
<ul style="list-style-type: none"> <li>• List of storage facilities, dealers of food.</li> <li>• Control room setup/assignment of control room duty.</li> <li>• Pre-positioning of staff for site operation centres.</li> <li>• Pre-arrangements to be made as per the demand of various departments.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>During Disaster</b></li> </ul>
<ul style="list-style-type: none"> <li>• Arrangement of alternative communication/generator sets etc.</li> <li>• Arrangement of vehicles/boats of for evacuation.</li> <li>• Dissemination of warning/coordination with District Control room.</li> <li>• Monitor the working of various departments and make frequent visits to disaster struck areas to cross-check.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>After Disaster</b></li> </ul>
<ul style="list-style-type: none"> <li>• Estimating the loss and damage and keep a record.</li> <li>• Share experiences with all the departments.</li> <li>• Continuous aid &amp; proper arrangements till situation is under control.</li> <li>• Monitor that the Repair &amp; Restoration work is in progress as planned.</li> <li>• Examine the performance reports of various departments.</li> <li>• Examine the reports in order to make amendments and prepare a better strategy by taking inputs from all departments.</li> </ul>



### Department of Health

<ul style="list-style-type: none"> <li>● <b>Non Disaster Time</b></li> <li>● Check on the tasks done at Zila, Tehsil &amp; Block level</li> <li>● Demarcate areas prone to epidemics and other similar disasters.</li> <li>● Coordination with private health organisations</li> <li>● Demarcate areas where medical camps can be set.</li> <li>● Take regular inputs from Swastha Kendras about any unwanted/hostile conditions in terms of endemic/epidemic diseases.</li> <li>● Awareness among people about diseases &amp; how can they be prevented from spreading.</li> <li>● Generators to be made available in all major hospitals.</li> <li>● Prepare a list of inventories required in case of disaster(vehicles/equipments/medicines)</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>● Construction &amp; repair of IEC inventory.</li> <li>● ORS &amp; other important medicines to be procured as requirement.</li> <li>● Training of employees and people regarding the basic treatment in case of flood/loo/minor bruises etc.</li> <li>● Procure necessary medicines for cases that are otherwise rare like snake bite, chlorine for cleaning water etc.</li> <li>● Prepare mobile units for sensitive &amp; prone to be hit areas.</li> <li>● Identification of sites in probable disaster areas for site operation areas</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>● Send task force with necessary medicines to affected areas.</li> <li>● Procure required medical equipments &amp; medicines in case they fall short of it.</li> <li>● Strong emphasis to be given to sensitive areas.</li> <li>● Ensure that appropriate no of Staff/Doctors are present at the affected areas.</li> <li>● Ensure cleanliness at the medical camps.</li> <li>● Frequent checks on the Staff/Doctors on duty.</li> <li>● Postmortem of dead bodies.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>● Monitoring against spreading of diseases</li> <li>● Continuous medical aid &amp; proper arrangements till situation is under control</li> <li>● Dead/Injured counselling</li> <li>● Injured/handicapped to be treated and arrangement for healthy living facilities</li> <li>● Provide healthy rehabilitation to disaster affected people.</li> </ul>



**Department of Transport**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer of the department as the Focal Point and inform all concerned.</li> <li>• Develop and implement disaster management plan for the department.</li> <li>• Carry out survey of condition of all highway systems at state and district level.</li> <li>• Identify and inventories transport vehicles available with the department and ensure that they are all in good working condition.</li> <li>• Identify and inventories transport vehicles available with the private operators in the district.</li> <li>• Allocate additional force to possible Disaster prone roads/routes identified</li> <li>• Ensure that the force so allocated are aware of the possible disaster prone spots on these routes along with the possible type of disaster which may happen, as in the case of Petrol and Diesel transport vehicles leading to and from the IOC depot.</li> <li>• Make departmental mitigation plan and ensure its implementation.</li> <li>• Enforce the speed limits in the government vehicles regulated by the department and organize departmental awareness programs for the same</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Depute an officer at the DEOC.</li> <li>• Ensure availability of fuel, recovery vehicles and equipment.</li> <li>• Take steps for arrangement of vehicles for possible evacuation of people</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Establish contact with the DEOC.</li> <li>• Take steps for transportation of relief personnel and material to affected areas.</li> <li>• Take steps for movement of affected population to safer areas.</li> <li>• Collate and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field.</li> <li>• Launch recovery missions for stranded vehicles.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Assess damage to transportation infrastructure.</li> <li>• Take steps to ensure speedy repair and restoration of transport links.</li> </ul>

**Department of Public Works**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. The Chief Executive Engineer</li> </ul>

will be the liaison.

- Take precautionary steps for the protection of government property against possible loss and damage during disaster.
- Formulate guidelines for safe construction of public works.
- Prepare list, with specifications and position, of heavy construction equipment within the district.
- Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
- Inspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works.
- Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer and identify structures which are endangered by the impending disaster.
- Emergency tool kits should be assembled for each division, and should include:
- The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room.
- Prepare mitigation plan for the department and enforce the same.
- Advise the district disaster management authority on structural mitigation measures for the district.
- Repair, Maintenance and retrofitting of public infrastructure.
- Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation.
- Place danger sign boards in the areas highly prone to specific type of disasters, such as road accidents etc.

**Warning Time**

- Establish radio communications with DEOC.
- Depute one representative at the DEOC as per the directions from DDMA.
- Instruct all officials at construction sites to keep manpower and materials prepared for protection and repair of public works.
- Direct construction authorities and companies to preposition necessary workers and materials in or near areas likely to be affected by disaster.
- Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary.
- Extra transport vehicles should be dispatched from district headquarters and stationed at safe strategic spots along routes likely to be affected.
- Heavy equipments, such as front-end loaders, should be moved to areas likely to be damaged and secured in a safe place.
- Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes.
- Give priority attention to urgent repair works that need to be undertaken in disaster affected areas.



<ul style="list-style-type: none"> <li>• Work under construction should be secured with ropes, sandbags, and covered with tarpaulins if necessary.</li> <li>• Emergency inspection by mechanical engineer of all plant and equipment in the district workshops.</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Provide assistance to the damage assessment teams for survey of damage to buildings and infrastructure.</li> <li>• Adequate road signs should be installed to guide and assist the drivers.</li> <li>• Begin clearing roads. Assemble casual laborers to work with experienced staff and divide into work-gangs.</li> <li>• Mobilize community assistance for road clearing by contacting community organizations and village disaster management committees.</li> <li>• Undertake cleaning of ditches, grass cutting, burning or removal of debris, and the cutting of dangerous trees along the roadside in the affected area.</li> <li>• Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.</li> <li>• As per the decisions of the District Emergency Operations Center undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centers, medical facilities, cattle camps and Incident Command Posts.</li> <li>• If possible, a review of the extent of damage (by helicopter) should be arranged for the field Officer-in-Charge, in order to dispatch most efficiently road clearing crews, and determine the equipments needed.</li> <li>• If people are evacuating an area, the evacuation routes should be checked and people assisted.</li> <li>• Identify locations for setting up transit and relief camps, feeding centers and quantity of construction materials and inform DEOC accordingly.</li> <li>• Take steps to clear debris and assist search and rescue teams.</li> <li>• Provide sites for rehabilitation of affected population</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Carry out detailed technical assessment of damage to public works.</li> <li>• Assist in construction of temporary shelters.</li> <li>• Organize repairs of buildings damaged in the disaster</li> <li>• Prepare detailed programs for rehabilitation of damaged public works.</li> <li>• Arrange technical assistance and supervision for reconstruction works as per request.</li> </ul>

**Department of Irrigation and Water Resources**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Communication establishment with District and Block/ Tehsil Control Rooms and departmental offices within the district.</li> </ul>
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<ul style="list-style-type: none"> <li>• An officer to be appointed as nodal officer.</li> <li>• Activation of flood monitoring mechanism</li> <li>• Methods/communication arrangement of alerting officers on various sites established</li> <li>• Check the preparation level of the department.</li> <li>• Identify the areas that face the maximum flow of the major rivers and also make the locals aware about it.</li> <li>• Identify the flood prone areas and demarcate them and also send a flood surveillance team to such areas.</li> <li>• Mark the maximum safe level of water at all the embankments of rivers, reservoirs and dams.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Mechanism evolved for forewarning settlements in the down stream/evacuation/coordination with other dam authority.</li> <li>• Identification of materials required for response operations</li> <li>• Repairs/ under construction activity are well secured</li> <li>• Water level gauges marked</li> <li>• Inlet and outlet to tanks are cleared</li> <li>• Watch and ward of weak embankments &amp; stock piling of repair materials at vulnerable points</li> <li>• Guarding of weak embankments</li> <li>• All staff informed about the disasters, likely damages and effects.</li> <li>• Procure necessary inventory for flood situations and keep it properly maintained.</li> <li>• Inventories for the case of breakage of dam/embankments like sand sacks, rocks, etc need to be brought and checked well in advance.</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Surveillance of flood hit/susceptible areas.</li> <li>• Make announcements about the coming flood.</li> <li>• Usage of advanced technology like GPS to calculate damage and the areas where maximum damage would occur.</li> <li>• Safety of equipments of the Irrigation department to be maintained.</li> <li>• Survey of major dams, embankments, bridges, channels etc is done.</li> <li>• Emergency help services to areas where bank got broken.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Estimating the loss and damage and keep a record.</li> <li>• Surveillance for protection of people.</li> <li>• Share experiences with the department.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> <li>• Training of staff to minimize the loss of life/property.</li> </ul>

**Department of Agriculture**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate a focal point for disaster management within the department.</li> <li>• Identify areas likely to be affected.</li> <li>• Arrange for keeping stock of seeds, fertilizers and pesticides.</li> <li>• A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.</li> <li>• Historical data to be gathered on the drought prone areas.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Provide timely warning to DEOC/DDMA about droughts.</li> <li>• Check available stocks of equipments and materials which are likely to be most needed after the disaster.</li> <li>• Stock agricultural equipments which may be required after a disaster</li> <li>• Determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly.</li> <li>• Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.</li> <li>• All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-proof</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Depute one liaison officer to the DEOC.</li> <li>• Monitor damage to crops and identify steps for early recovery.</li> <li>• Estimate the requirement of  Seeds  Fertilizers  Pesticides, and Labour.</li> <li>• Organize transport, storage and distribution of the above with adequate record keeping procedures.</li> <li>• Ensure that adequate conditions through cleaning operations are maintained to avoid water-logging in flooded areas.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Quantify the loss and damage within the quickest possible time and finalize planning of agriculture rehabilitation.</li> <li>• Ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements.</li> <li>• Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.</li> </ul>



**Department of Rural Water Supply & Sanitation**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Provide clean drinking water in all areas rural/urban.</li> <li>• Regular cleaning of nalas and prevent them from choking.</li> <li>• Facilitate proper drainage in all areas to prevent diseases.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Proper arrangement of water tankers in good condition.</li> <li>• Arrange for generators in advance.</li> <li>• Make necessary arrangements of chlorine tablets for disaster prone/expected areas.</li> <li>• Repair the platforms of tube wells if required and any other necessary repairs if required to avoid damage.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Cleaning water sources and continuous monitoring.</li> <li>• Supply of clean water at hospitals and medical camps.</li> <li>• Provide water through water tankers wherever required.</li> <li>• Provide emergency help to clean and start tube wells &amp; other water sources.</li> <li>• Repair of damaged water sources to be carried out.</li> <li>• Aware people about how to keep the hand pumps free of microbial infections.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Reinforcement &amp; reconstruction of damaged sources and to keep records.</li> <li>• Share experiences with the department.</li> <li>• Training of employees.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>

### Department of Veterinary

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Communication establishment with district and Block / Tehsil control rooms and departmental offices within the division.</li> <li>• Listing of club houses, schools, community centers that can be used as shelter for animals.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Collect information from different areas and to act accordingly (Assignment of duties).</li> <li>• Preparation of shelters in clubs, Schools, Halls etc, for animals and shifting them if necessary.</li> <li>• Tagging the animals to avoid mix up and chaos.</li> <li>• Getting proper stock of fodder for cattle.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Veterinary Hospital &amp; Veterinary Dispensary at every important place (thickly cattle populated areas) headed by the Veterinary Assistant/ Surgeon.</li> <li>• Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.</li> <li>• Replacement of affected cattle in the shelters/camps, collection of fecal waste and cleaning etc.</li> <li>• Feeding the animals.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Veterinary First Aid centre/stockman sub-centre at most of the areas to me made and all the wings should be ready to combat the situation.</li> <li>• Getting the animals back to their owners and returning the stray ones to Nagar Maha Palika.</li> <li>• Cleaning of temporary shelters.</li> </ul>

**Department of Fire Service**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Strict enforcement of laws made for the security of Fire squad and proper proceedings to be done in case the law is violated.</li> <li>• Regular check of equipments and procuring new ones as and when necessary.</li> <li>• Demarcating Industries and areas susceptible to fire, events that are susceptible to fire etc.</li> <li>• Aware people about their safety how to mitigate fire &amp; its effects.</li> <li>• Training of employees keeping their safety in mind.</li> <li>• The blueprint of any building/house should not be accepted without proper Fire Safety measures.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Train people how to mitigate fire in early stages and foremost how to avoid it.</li> <li>• Training of people on how to react in an emergency situation.</li> <li>• Train staff and Raj Mistri’s about latest Fire Fighting techniques</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Find a safe way to save people trapped in fire in a house/ building/ aero plane/ train/ industry/ boiler etc.</li> <li>• Get control over fire and minimize damage in case of an explosion.</li> <li>• Control the situation in case of gas leak or leakage of some dangerous chemical.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Help other departments in search &amp; rescue and estimation of damage.</li> <li>• Share experiences with the department.</li> <li>• Training of employees about new disasters (related to fire) that can occur.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>



### Department of Telecommunications

<b>Non Disaster Time</b>
<ul style="list-style-type: none"><li>• Communication establishment with District and Block /Tehsil Control Rooms and departmental offices within the division.</li><li>• An officer to be appointed as nodal officer.</li><li>• Continuous training of staff on the usage of new equipments that are procured.</li></ul>
<b>Warning Time</b>
<ul style="list-style-type: none"><li>• Prepare an inventory of resources that would be required and procure the material based on estimation.</li><li>• Train staff on quick response to restore the Tele-connectivity of the district.</li></ul>
<b>During Disaster</b>
<ul style="list-style-type: none"><li>• Standby arrangements for temporary electric supply or generators.</li><li>• Inspection and repair of poles etc.</li><li>• Identification of materials required for response operations.</li></ul>
<b>After Disaster</b>
<ul style="list-style-type: none"><li>• Repair of damaged poles &amp; lines etc as soon as possible to restore Tele-connectivity in the district.</li><li>• Share experiences with the department.</li><li>• Training of employees for better performance.</li></ul>

### Home Guards

<b>Non Disaster Time</b>	<ul style="list-style-type: none"> <li>• Get details of the staff with their address and phone numbers</li> <li>• Arrange for details of fuel arrangement for ships-mechanized launches at the time of emergency.</li> <li>• Do's and Don'ts to be observed during emergencies and details of priorities should be given to the staff.</li> <li>• Set up for evacuation of people from affected area of the river side area.</li> <li>• Details of buildings, vehicles and equipments and list of contractors with vehicles and equipments should be procured.</li> <li>• Prepare map showing rivers and the important routes</li> <li>• Maintain communication equipments, telephone line, telex lines, megaphone and amplifiers with statistical data.</li> <li>• Make a list of details of important telephone numbers of water supplies, control room, hospitals, drainage system, railway stations, bus depots, strategically important places, Army Air force Navy camps and other sensitive places, major industrial units, and other communication channels which can be used during emergency.</li> <li>• Ensure the arrangement for transportation &amp; evacuation of people from the affected areas.</li> <li>• Prepare the action plan regarding repairs and alternative ways in case of disruption of transportation.</li> <li>• Prepare plan showing the alternative routes and arrangement for transportation of goods etc; during emergencies.</li> <li>• Inspect the garages and control point etc; which are damage prone.</li> <li>• Make due arrangement for materials to restore the facilities in case the movement of the materials and goods on the ports are damaged.</li> <li>• Prepare an action plan to avail on temporary bases, the technical personnel from the nearby district which is not affected.</li> <li>• Collect the details of swimmers in the district.</li> <li>• Make arrangement for sufficient fuel during emergency.</li> </ul>
<b>Warning Time</b>	<ul style="list-style-type: none"> <li>• Maintain the equipments available such as cranes, diesel generator, earth mover machines, de-dusting pumps, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, etc. which can be used during emergency and will ensure that those are in the working conditions.</li> <li>• Take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities.</li> <li>• Prepare a list of public properties related to transport department, which are in the damage prone area and will arrange in advance to minimize the damage.</li> <li>• Specifically take action to ensure that the fishermen do not move out for fishing as well as sailing during the final warnings of flood, etc.</li> <li>• Evacuate the fishermen to a safe place and if they deny, to get it done forcefully.</li> <li>• Ensure that the warning signals are received in time and shown immediately to the people.</li> </ul>

<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Undertake the work of search and rescue and also the relief work</li> <li>• Set up a temporary special control room and information centre at the main bus station.</li> <li>• Immediately contact the district control room and will assist in the work</li> <li>• Ensure that the staff is on duty at the headquarters.</li> <li>• Assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.</li> <li>• Ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency.</li> <li>• Consult the liaison officer to close the ports and sailing in the rivers, which is damage prone or dangerous for the safety of the people as well as the property.</li> <li>• Assist the administration to send the messages regarding warning to the remote area</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Follow the instructions of District Liaison Officer.</li> <li>• Carry out the duty assigned for search and rescue work.</li> <li>• Engage the resources and manpower available to manage the disaster.</li> <li>• Review the matters regarding closing of movement at the port for safety measures and will ensure that it is restarted very soon.</li> <li>• To contact the district control room if additional equipments, vehicles, manpower, technical personnel are necessary to restore the port related activities.</li> <li>• Prepare a primary survey report of damage and send it to the District Control Room and to the administrative head.</li> <li>• Collect the details of approach roads connecting the damaged area and get them repaired in co-ordination with the competent authority</li> </ul>

**Rural Development Department**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department and the district as the Disaster Management Focal Point.</li> <li>• Develop a district disaster management plan for the department.</li> <li>• Prepare maps showing population concentration and distribution of resources.</li> <li>• Encourage disaster resistant technological practices in buildings and infrastructure.</li> <li>• Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.</li> </ul>
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<ul style="list-style-type: none"> <li>• Report activities in periodic meetings of the district disaster management advisory committee and to DDMA.</li> <li>• In coordination with PWD conduct regular training to the engineers of the department.</li> <li>• Appoint one officer as focal point for mitigation activities</li> <li>• On the basis of its developmental responsibility, liaise with other line departments and agencies for a coordinated mitigation approach.</li> <li>• In coordination with the DDMA, conduct building assessments, identification of structural and non structural mitigation activities.</li> <li>• Organize awareness programmes for BDO's, Panchayat secretaries and Gram Pradhans on structural and no-structural mitigation activities.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Focal Point in department to keep in touch with the DEOC.</li> <li>• Alert all concerned about impending disaster.</li> <li>• Ensure safety of establishments, structures and equipment in the field</li> <li>• Ensure formation of committee for rescue, relief and rehabilitation work and local volunteer teams.</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Ensure information flow from affected Gram Panchayats and maintain regular contact with DEOC (24 hrs).</li> <li>• Support revenue department in establishing ICP's in the affected areas</li> <li>• Ensure availability of drinking water at times of need.</li> <li>• Provide necessary infrastructure to carry out relief works</li> <li>• Assess initial damage</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Quantify the loss/damage</li> <li>• Organize reconstruction of damaged houses on self help basis with local assets and materials received from the government.</li> <li>• Take up repair/reconstruction work of infrastructure damaged by disaster</li> </ul>

**Panchayat Raj**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Develop a disaster management plan for the department at district level &amp; update it annually.</li> <li>• Analyze the training needs of the department's personnel, which include its officials and elected representatives of Gram Panchayat, Panchayat samiti's and Zila Panchayat and organize trainings with the help of HIDM or other agencies.</li> <li>• Conduct gram Panchayat level mock drills as part of preparedness.</li> </ul>
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<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Prepare &amp; implement department's mitigation plan</li> <li>• Ensure that all the development schemes of the department have a mitigation component as an integral part</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Coordinate with local authorities and support the response efforts.</li> <li>• Coordinate the support from unaffected gram Panchayats.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and Zila Parishad meetings</li> </ul>

**Forest Department**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Prepare a department disaster management plan for the district.</li> <li>• Depute one liaison officer for disaster management.</li> <li>• Forest Fire prone areas should be identified and extra vigilance be ensured in such cases.</li> <li>• Depute one liaison officer within the department, who will be in contact with the SEOC during disasters.</li> <li>• Every year pre-fire season meetings should be organized to take the stock of the preparedness at Range level</li> <li>• Prepare &amp; maintain forest lines</li> <li>• Organize community awareness programs</li> <li>• Train the Gram Panchayat disaster management committees in forest fire prevention, protection and control, especially in those gram Panchayat which are located at the fringes of forest areas.</li> <li>• Prepare mitigation plan for the department buildings and infrastructure.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• A rapid response team will be established at division/sub-division/range level, which will have all tools and equipments readily available.</li> <li>• Information regarding issue alerts to nearby population</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Respond within the department as per the department disaster management plan</li> <li>• The liaison officer will coordinate with DEOC for information exchange &amp; also for requirements of resources to &amp; from DEOC</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Damage assessment and sharing of reports with DEOC</li> </ul>

### Department of Food & Civil Supplies

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Make go downs in disaster prone areas in advance.</li> <li>• Collect necessary resources keeping the type and intensity of disasters that have previously occurred or are expected to occur.</li> <li>• Make proper arrangements so that the stock in the go downs does not rot/spoil.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Make necessary arrangements according to the expected requirements and procure the material which the department is short off.</li> <li>• Form teams and train them on how to ration resources.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Proper keeping of resources.</li> <li>• Arrangements made for the distribution like vehicles through help from DDMA or other departments.</li> <li>• Make an inventory according to the prevailing needs and the estimated time and hence procure the needful.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Use the equipments/resources from time to time so that they remain in working condition.</li> <li>• Strict monitoring to keep a check on unauthorized using of resources and legal proceedings to be carried out if required.</li> </ul>

### Electricity Department

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Prepare and manage inventory for emergency operations.</li> <li>• Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments.</li> <li>• Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments.</li> <li>• Make people aware so as to minimize the damage to life/limb caused due to electricity.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Make provisions for providing electricity to rehabilitation centers in disaster hit areas &amp; to cut off electric supply from risky areas in case of emergency.</li> <li>• Follow proper regulations monitor continuously so that in case of wire breakage the current does not spread.</li> <li>• Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.</li> </ul>
<b>During Disaster – Response</b>





<ul style="list-style-type: none"> <li>• Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused.</li> <li>• Survey the spot and estimate (also help in estimation) the damage caused.</li> <li>• Be ready to provide electricity in areas where it is needed and can be provided safely.</li> <li>• Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc.</li> <li>• Examine and repair major poles, transformers &amp; wires necessary for getting electricity supply back to areas needed.</li> <li>• Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time.</li> <li>• Restore the electricity facility in affected areas.</li> </ul>
<b>After Disaster – Recovery and Rehabilitation</b>
<ul style="list-style-type: none"> <li>• Repair of damaged poles, transformers and conductors etc as soon as possible to restore electricity in the district.</li> <li>• Surveillance for protection of people.</li> <li>• Share experiences with the department.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>

**Department of Education**

<b>Non Disaster Time – Preparedness</b>
<ul style="list-style-type: none"> <li>• Identify one Liaison Officer in the department at district level as Disaster Management Focal Point.</li> <li>• Develop district level disaster management plan for the department</li> <li>• In consultation with DDMA, state education directorate and state education board include disaster related subjects in the curricula in schools, and colleges.</li> <li>• Arrange for training of teachers and students on Dm and school safety activities.</li> <li>• Ensure that all schools and colleges develop their disaster management plans.</li> <li>• Ensure that construction of all educational institutions in earthquake zones is earthquake resistant.</li> <li>• Conduct regular mock drills in the educational institutes</li> </ul>
<b>Non Disaster Time –Mitigation</b>
<ul style="list-style-type: none"> <li>• Identify structural and non structural mitigation measures and get them implemented.</li> <li>• In coordination with the SSA &amp;/or Public works department assess schools and colleges buildings conditions and place the proposal of retrofitting of the structurally unsafe buildings with the state education department and/or DDMA.</li> <li>• Make departmental mitigation plan and ensure its implementation.</li> <li>• Ensure that earthquake resistant features are included in new school buildings.</li> </ul>
<b>During Disaster – Response</b>
<ul style="list-style-type: none"> <li>• In the event of disaster, place required number of education institutions and their buildings, under the DEOC for use as</li> </ul>

<p>emergency shelter and relief centre, if necessary.</p> <ul style="list-style-type: none"> <li>• Students and staff trained as task forces as part of the school disaster management planning’s can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.</li> </ul>
<b>After Disaster – Recovery and Rehabilitation</b>
<ul style="list-style-type: none"> <li>• Determine the extent of loss in educational institutions and submit the report to DDMA and state education department.</li> </ul>

### Department of Industrial Health and Safety

<b>Non Disaster Time –</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the Department as the Disaster Management Focal Point at district level.</li> <li>• Ensure all possible steps for the security of manpower, implements, stock, installations/factories etc.</li> <li>• Prepare listing and locations of industries and establishments for possible sourcing of relief material during disasters in the district.</li> <li>• Ensure training on preparedness programmes to be adopted at different levels for all manpower employed in factories and establishments in disaster vulnerable areas.</li> <li>• Issue disaster management guidelines to all the industries and ensure on-site and off-site plans for all industries.</li> <li>• Prepare and disseminate guidelines for the labor security and safety.</li> <li>• Prepare and implement rules and regulations for industrial safety and hazardous waste management.</li> <li>• Support the State Pollution Control Board to enforce the law for preventing environmental disaster in chemical industry or industries emitting toxic gases and effluents.</li> <li>• Issue detailed instructions to the employees about their duties and responsibilities in precautionary, disaster and post-disaster stages of normal disaster.</li> <li>• Prepare and disseminate public awareness material related to chemical accidents.</li> <li>• Prepare &amp; implement department’s mitigation plan for the district</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Evacuation o the workers from the Industrial are vicinity</li> <li>• Request industries to provide emergency relief material such as food products, temporary shelter, medicines and medical equipment and search &amp; rescue equipment.</li> <li>• During any industrial disaster, respond as per the disaster management plan of the respective industry or as per the guidelines for the specific hazard involved in the event.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Take steps to plan for rehabilitation of industries adversely affected by disasters.</li> </ul>

## Department of Urban Development

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department at district level as the Disaster management Focal Point.</li> <li>• Develop a disaster management plan for the department, including the identification of location of camps for different type of disasters, existing locations that can be used as shelters, inventories of agencies that can be used for tent establishment.</li> <li>• To conduct regular training the staff on minimum standards for shelter, relief camps and tent structures.</li> <li>• Prepare department’s disaster management plan.</li> <li>• Develop alternative arrangements for population living in structures that might be affected after the disaster.</li> </ul>
<p><b>Mitigation</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department as focal point for the mitigation activities.</li> <li>• Coordinate with the DDMA for implementation of mitigation activities in the urban areas.</li> <li>• Prepare &amp; implement department’s mitigation plan</li> </ul>
<p><b>Alert and Warning Stage</b></p> <ul style="list-style-type: none"> <li>• In case of damage to offices, assist local authorities to establish and house important telecom equipment and officials at the earliest</li> <li>• Setting up water point in key locations and in relief camps</li> </ul>
<p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Quick assessment of damaged areas and areas that can be used for relief camps for the displaced population</li> <li>• Locate adequate relief camps based on survey of damage</li> <li>• Clear areas for setting up relief camps</li> <li>• Locate relief camps close to open traffic and transport links</li> <li>• Set up relief camps and tents using innovative methods that save time</li> <li>• Provide adequate and appropriate shelter to the entire population</li> <li>• Coordinate with other ESFs in equipping shelter and relief sites with basic needs of communication and sanitation.</li> <li>• Maintaining and providing clean water</li> <li>• Procurement of clean drinking water.</li> <li>• Coordinate with DEOC &amp; ICP’s for proper disposal of dead bodies in the urban areas.</li> </ul>
<p><b>Recovery and rehabilitation</b></p> <ul style="list-style-type: none"> <li>• Implement recovery &amp; rehabilitation schemes through municipalities for urban areas.</li> </ul>



### Indian Red Cross and NGOs

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Take steps for preparing community based disaster management plans with facilitation from DDMA.</li> <li>• Identify volunteers in disaster prone areas and arrange for their training.</li> <li>• Awareness raising programs, seminars and meetings with the people for improving their capacity to face disasters.</li> <li>• Maintain contacts with District Administrators on its activities.</li> <li>• Ensure road communication and pre-positioning of relief material as close as possible to disaster prone communities.</li> </ul>
<p><b>Alert and Warning Stage</b></p> <ul style="list-style-type: none"> <li>• Issue warning notice to all concerned including the preparedness programs Designate a liaison officer for maintaining link with the DEOC of the District.</li> <li>• Keep the survey and relief team of head quarters on stand-by in readiness with required transport and equipment.</li> <li>• Mobilise volunteers and issue instructions for sending them to potential disaster affected areas.</li> <li>• Take part in evacuation programme of population with close cooperation of volunteers</li> <li>• Coordinate with pre identified NGOs for possible joint operations.</li> </ul>
<p><b>During Disaster :</b></p> <ul style="list-style-type: none"> <li>• Ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned Red Crescent Society Units.</li> <li>• Assist the Province Government to determine loss, damage and needs related information.</li> <li>• Give emergency assistance to disaster affected people especially in the following cases:</li> <li>• Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,</li> <li>• Arrange for distribution of relief material received from Red Crescent Unit of areas not affected by disaster and from headquarters.</li> <li>• Send request for requirement of relief and rehabilitation to the International Federation of Red Cross and Crescent Societies (IFRC) after informing about loss and damage due to disaster.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Participate in reconstruction and rehabilitation programmes in special circumstances.</li> <li>• Take steps for correct and effective evaluation of preparedness work and for correcting errors/weakness in such work.</li> <li>• Extend Cooperation to the district EOC for disaster documentation.</li> </ul>

## **C 2.2 Hazard specific SOPs for designated Departments and Teams**

Provided in the annexure.

## **C 3 Financial Provisions for Disaster Management**

### **Funds generation:**

Reconstruction and rehabilitation projects are resource intensive. These projects have been financed in the past primarily through the state exchequer. In the recent past funds have also been raised from international agencies. Government of MP shall finalise the fund generation mechanism, including the covenants and measures that govern fund inflow and disbursement and usage. This includes:

1. Estimation of funds required based on detailed damage assessment report and consolidation of the same and the sectoral and regional heads.
2. Contracting with funding agencies and evolving detailed operating procedures for fund flow and corresponding covenants.

### **FUND DISBURSEMENT AND AUDIT:**

The funds raised from funding agencies are usually accompanied by stringent disbursement and usage restrictions. It is therefore important to monitor the disbursement of such funds to ensure that none of the covenants are breached. MPSDMA in conjunction with relevant agencies shall monitor disbursement of funds to avoid duplication of the funds and relief/ rehabilitation activities to be routed through the SDMA executive committee / DDMA.

## **C 4 Coordination mechanisms with other stakeholders**

### **C 4.1 Mapping of stakeholders in the District**

#### **C 4.1.1 Private and Public Sectors:**

Many private and public sector units have equipments and skilled human resource, which could be used during response and recovery phase. A list of the major public and private sector units with facilities available with them is very useful during emergencies, which will be provided here in this section. Further, there are many private vendors within district, who can readily supply different relief materials within short notice.

Historically, corporate sectors have been supporting the disaster relief and rehabilitation activities. However, the involvement of corporate entities in disaster risk reduction activities is not significant. Corporate entities should redefine their business community plan to factor in hazards, risks and vulnerabilities. They should also create value in innovative social investments in the community. Public Private Partnership between the Government and private sector would also be encouraged to leverage the strengths of the latter in disaster management. The NDMA and SDMA need to network with the corporate entities to strengthen and formalize their role in the DM process for ensuring safety of the communities.

#### **C 4.1.2 Non Governmental Organizations and Community Based Organisations:**

Local NGOs and CBOs, due to their proximity to community, can act as a vital link between government and community particularly during emergencies.

**NGOs :** The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.

NGOs and CBOs have responded promptly and effectively in most of the emergencies both during the immediate response and in the recovery phases. Even the NGOs located far away from the disaster affected area have rushed their relief teams in. There is a need to coordinate the activities of a large number of NGOs and CBOs. This will be achieved by designating one of the local NGOs as the coordinator for activities and relief materials being arranged by other NGOs. The designated local NGO will provide the interface between the large number of NGOs and the district administration.

#### **C 4.1.3 Religious Institutions:**

There are number of religious institutions with infrastructural facilities and committed work force. These facilities can be used as shelters during disasters and the work force could be used as volunteers during response and recovery activities.

- Indore diocese
- Gurudwara near A.B road bus stand.
- Grace church, Dewas.

#### **C 4.1.4 Academic Institutions:**

The only institution which would act as reference for any disaster analysis is DMI Bhopal.

#### **C 4.1.5 International Humanitarian Organizations:**

No such organizations working in Dewas.

#### **C 4.2 Responsibilities of the stakeholders**



Community members: Community based initiatives for preparedness, mitigation, response and relief should be taken by the community members in a participative approach.

NGOs : The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.

#### **DDMA / DDMC team members:**

#### **DDMA roles:**

- Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines.
- Providing inputs to MPDMDA relating to various aspect of disaster management including early warnings, status of preparedness etc
- Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues
- Developing an appropriate relief implementation strategy for the district taking into account the unique circumstances of the district and prevailing gaps in institutional capacity and resources of the district
- Facilitating and coordinating with local govt bodies to ensure that pre disaster DM activities in the district are carried out optimally
- Facilitating community training, awareness programs and the installation of emergency facilities with the support of local administration, NGOs and the private sector
- Establishing adequate interdepartmental coordination on issues related to disaster management
- Reviewing emergency plans and guidelines
- Involving the community in the planning and development process
- Ensuring that local authorities including municipal corporation, gram panchayatss etc in the district are involved in developing their own mitigation strategies
- Ensuring appropriate linkage between DM activities and planning activities
- Revisiting or re assessing contingency plans related to disaster management
- Ensuring that proper communication systems are in place and contingency plans maximize the involvement of local agencies

#### **District Disaster Management Committee (DDMC)**

Besides this, the Disaster Risk Management Programme also traced much to form committees at the three levels with plans and task forces. A Disaster Management Committee exists to assist the Collector in:

- Reviewing the threat of disasters
- Vulnerability of the district to such disasters
- Evaluating the preparedness

- Considering the suggestions for improvement of the response document DDMP

The Committee meets once a year under the chairmanship of the Collector

### Responsibilities of District collector:

During the time of emergency the District Collector would act as the focal point for control and coordination of all activities. His responsibilities would be:

- Get in touch with the local Army/Navy/Airforce units for assistance in rescue, evacuation and relief;
- He will have the authority to requisition resources, materials and equipment from all Departments/Organizations of the government and also from the private sector;
- He will have the power to direct the industry to activate their on-site and off-site disaster management plan;
- He will set up Site Operations Centre in the affected area with desk arrangements;
- He will authorize establishment of transit and/or relief camps, feeding centers and cattle camps;
- He will send Preliminary Information Report and Action Taken Report to the State Relief Commissioner and Divisional Commissioner;
- He will authorize immediate evacuation whenever necessary.
- The Collector can co-opt any officer of the State Government posted district if he feels that the services of that officer are required for emergency planning or response operations.

Traditionally Tehsil office and local police station are the main government agencies below the district level, which initiate trigger mechanism for emergency operations in the event of a major accident/disaster. In view of limitations of resource availability for emergency management below the district level, DEMP has not proposed any administrative structure for emergency operation and coordination at lower levels. In the event of not too serious disaster/accident, the local tehsil office or police station would continue to initiate trigger mechanism and provide an emergency response with the help of locally available resources.

DCG on receipt of information from any of the two agencies would take appropriate decision to augment local resources and give appropriate instructions to the concerned response agencies.

## C 5 Inter- District Coordination Mechanisms – [Standard Operating Procedures / Protocols]

- If a district has dams, the neighboring districts should be warned when the dams are opened as the water flow from them might cause flood in the adjoining rivers. This requires proper coordination among the districts by the help of officials of reservoirs by informing district authorities about when and how much water is being released so that these authorities can share this information with the CWC who can then help in predicting or forecasting which all areas are likely to be affected. For Dewas district it is Hoshangabad with which it has to coordinate for the water release from the dams there. The waters of Narmada are being controlled by the dams of Hoshangabad.
- During the time of disaster if the district is unable to cater to the requirements of the situation, it can seek help from the nearby districts in terms of resources or man power like health department, home guard department, RTO, fire department, food and police. Sometimes inventory is taken from Jabalpur district when Dewas cannot meet the necessity during disaster. **The list is provided in the Annexure.**
- Every key department can do with a POC who can be equipped with powers to order forces to the districts in need immediately so that further losses can be minimized.
- The emergency team should have the updated checklists, contact numbers and information about all the districts.

- In case of earthquake affected districts, the neighboring districts should provide and help in coordinating for temporary shelters along with the line departments.

## **C 6 Intra- District Coordination Mechanisms – [with Block Headquarters]**

### **District level**

At district level, Collector acts as the focal point for all types of disaster response and recovery activities. At the district level, as there is no formal committee for ensuring a coordinated response, the Collector is responsible to ensure smooth functioning of a non-formal team of officials from different State government agencies. The power of sanction of relief is vested with officials of Revenue Department at different levels, depending upon the operational needs. The Collector is able to ensure participation of different State Government agencies in the response and recovery activities and provides the necessary financial support and sanctions from the funds available with him for relief and for rural development works. He also manages to get the support, both managerial and material, from the NGOs.

### **Structure for Flood Management in the District**

#### ➤ **Sub-Divisional Committee for Flood Management**

At sub-division level a committee has been constituted, which has the responsibility to do necessary arrangements for rescue, relief, safe drinking water and primary health care facilities in a flood situation. The members of the committee comprise of:

- i. Sub-divisional Magistrate
- ii. DFO
- iii. City Superintendent of Police
- iv. Executive Engineer.
- v. Executive Engineer, Water Resource Department
- vi. Commissioner, Municipal Corporation
- vii. District Food Officer/Assistant DFO/Food Inspector (City & Rural Area)
- viii. SDO, PWD, Building and Roads.
- ix. SDO, Telecommunication.
- x. SDO
- xi. Assistant Surgeon, Vet. Department.
- xii. CEO, Janpad panchayat
- xiii. Depot Manager, MP State Road Transport Corporation
- xiv. CMO
- xv. Assistant Engineer, MPEB (Concerned Sub-division)



➤ **District Emergency Management Structure provided Under the Plan**

The proposed organizational structure in this District Plan is based on the following three related concepts:

Plans work best within existing organizational structures, if they are currently responsive to non-emergency duties.

- Crisis should be met at the lowest and most immediate level of government. Plans call for local response supplemented, if necessary, by the next higher jurisdiction.
- Voluntary response and involvement of the private sector (business, industry and the public) should be sought and emphasized. The emergency management partnership is important to all phases of natural and technological disasters.

➤ **District Planning Committee (DPC)**

District Planning Committee (DPC) created under the Madhya Pradesh Zila Yojana Samiti Adhiniyam, 1999 would be overall in-charge of emergency management planning. It will help ensuring partnership of the local community, NGOs and government agencies in the planning process.

**Responsibilities of the Committee**

- Evaluation, approval and updating of District Emergency Management Plan
- The committee will meet to review the overall mitigation and preparedness activities in the district.

The committee would review, at least once every year, the emergency planning in the district.

➤ **District Crisis Group (DCG)**

An effective Emergency Management strategy requires quick decision-making relating to issues of warning, conducting evacuation and rescue & relief operations in the event of a disaster. This requires a core team of senior decision-makers having administrative control over the key resource organizations. Therefore, this plan provides for constitution of a DCG (District Crisis Group) with District Collector as its leader.

The responsibility for dissemination of District Emergency Management Plan would be of DCG. In order to make emergency management process more effective in the district, it is important that District Emergency Management Plan should be disseminated at all levels: the district authority, government departments, non-government/private organizations and general public. Effective implementation of the DEMP would be done through training programmes and awareness activities organized for different levels of functionaries.

**Composition of DCG**

District Crisis Group will include:

- i. District Collector (Team leader)
- ii. Superintendent of Police
- iii. District Commandant , Homeguards
- iv. Executive Engineer, PWD.
- v. Divisional Engineer, MPEB

- vi. Chief Medical Officer , CMO
- vii. Municipal Commissioner
- viii. Chief Executive Officer , Zila Panchayat
- ix. Chief Engineer

District Crisis Group members may be required to reach the affected area for monitoring and coordination of the response functions at the site. District Emergency Control Room (DECR) will facilitate functioning of DCG even when its members may be in the affected area. The members of DCG will be provided with wireless facility for interaction with DECR.

### **Responsibilities of the DCG**

- a. On the spot decision making
- b. Control and coordination of response and recovery activities in the district
- c. Resource mobilization and replenishment
- d. Monitoring of overall Mitigation, Preparedness Response & Recovery activities.
- e. Preparation of reports for submission to State Government through Relief Commissioner

#### **➤ District Emergency Control Room (DECR)**

A single District Emergency Control Room (DECR) will function with desk arrangements for specific activities during an emergency. DECR will have senior representatives from the key resource organizations to facilitate a coordinated response. The DECR would be linked to Emergency Operation Centre (EOC) constituted at state level.

#### **➤ Site Operation Center (SOC)**

A Site Operation Center (SOC) as a proposed complimentary unit to DECR, would operate close to the emergency site and would be directly, linked with the district level control room (DECR). The District Collector would appoint an Administrative officer to monitor & coordinate the activities of SOC and thus act as incident controller. All information would be conveyed to the Collector through the Administrative Officer appointed for SOC.

The Collector will appoint a senior administrative assistant as officer in-charge (OIC) of DECR. Desk Officers from key response organizations will support the officer in-charge of DECR. In the event of an emergency, additional staff will be deployed to assist in the functioning of DECR.

## **C 7 Dissemination of DM Plan**

After the approval of plan by SDMA, the concerned DDMA will be responsible for dissemination of the plan.

The district disaster management plan must be disseminated at three levels;

- National disaster Management Authority (NDMA), multilateral agencies (aid agencies), SDMA/SEC, state line departments and defense services.
- To the district authorities, government departments, NGOs and other agencies and institutions within the district
- Through mass media to the general public.

This section will explain in detail, about the means of dissemination of district disaster management plan at the different levels.

### **C 7.1 Plan Evaluation**

The purpose of monitoring & evaluation of DDMP is to determine the adequacy of resources, co-ordination between various agencies, community participation, partnership with NGOs and other entities, Post-disaster evaluation mechanism, Periodic uploading of plans at India Disaster Knowledge Network (IDKN) and resources on India Disaster Resource Network (IDRN), Conducting periodic mock drills, Checking whether all the personnel involved in execution of DDMP are trained and updated on the latest skills necessary in line with updated plans.

### **C 7.2 Plan Update**

The frequency of updating the plan (DDMP) will be mentioned (it should be every year, as per DM Act). Apart from it, the plan will be updated when shortcomings are observed in Organizational structures; Technological changes, Response mechanism following reports on drills or periodic exercises, and specific assignments of state agencies.

*Kindly verify the facts with DDMA about the DM Plan evaluation and update of the same.*

## **C 8 Annexure**

*Linkage of Annexure with chapters to be mentioned in the respective chapters / sections as well.*

The following Annexure must be included along with the plan. Additional Annexure can also be attached according to the specific Need.

### **C 8.1 District profile**



Latest data on the geography, demography, agriculture, climate and weather, roads, railways etc that describes the district will be provided. However, adequate care will be taken to summarize the data so as to not make the plan document bulky.

## **C 8.2 Resources**

- Hazard specific infrastructure and manpower will be covered here
- Usage of IDRN, IDKN, etc (updating them, latest update available etc)

## **C 8.3 Media and information management**

A List of location based key news channels, journalists, cable network operators will be available along with contact details.

## **C 8.4 Important Contact numbers( provided in the annexure)**

Latest important contact numbers of District and Block level key officials AND agencies including EOC, DMTs, DDMOs (District Disaster Management Officers), DDMC members, DC Office, Revenue & Relief deptt, fire, irrigation and flood control, police, and other nodal authorities/ persons will be provided.

## **C 8.5 Do's and don'ts of all possible hazards**

### **Do's and Don'ts**

### **EARTHQUAKES**

#### ***What to Do Before an Earthquake***

- Repair deep plaster cracks in ceilings and foundations. Get expert advice if there are signs of structural defects.
- Anchor overhead lighting fixtures to the ceiling.
- Follow BIS codes relevant to your area for building standards
- Fasten shelves securely to walls.
- Place large or heavy objects on lower shelves.
- Store breakable items such as bottled foods, glass, and china in low, closed cabinets with latches.
- Hang heavy items such as pictures and mirrors away from beds, settees, and anywhere people sit.
- Brace overhead light and fan fixtures.
- Repair defective electrical wiring and leaky gas connections. These are potential fire risks.
- Secure a water heater, LPG cylinder etc., by strapping it to the wall studs and bolting it to the floor.
- Store weed killers, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.
- Identify safe places indoors and outdoors.
  1. Under strong dining table, bed
  2. Against an inside wall
  3. Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over

4. In the open, away from buildings, trees, telephone and electrical lines, flyovers, bridges
- Educate yourself and family members
  - Know emergency telephone numbers (doctor, hospital, police, etc)

***Have a disaster emergency kit ready***

- Battery operated torch
- Extra batteries
- Battery operated radio
- First aid kit and manual
- Emergency food (dry items) and water (packed and sealed)
- Candles and matches in a waterproof container
- Knife
- Chlorine tablets or powdered water purifiers
- Can opener.
- Essential medicines
- Cash and credit cards
- Thick ropes and cords
- Sturdy shoes

**Develop an emergency communication plan**

1. In case family members are separated from one another during an earthquake (a real possibility during the day when adults are at work and children are at school), develop a plan for reuniting after the disaster.
2. Ask an out-of-state relative or friend to serve as the 'family contact' After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

**Help your community get ready**

1. Publish a special section in your local newspaper with emergency information on earthquakes. Localize the information by printing the phone numbers of local emergency services offices and hospitals.
2. Conduct a week-long series on locating hazards in the home.
3. Work with local emergency services and officials to prepare special reports for people with mobility impairments on what to do during an earthquake.
4. Provide tips on conducting earthquake drills in the home.
5. Interview representatives of the gas, electric, and water companies about shutting off utilities.

Work together in your community to apply your knowledge to building codes, retrofitting programmes, hazard hunts, and neighborhood and family emergency plans.

**What to Do during an Earthquake**

- Stay as safe as possible during an earthquake. Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur. Minimize your movements to a few steps to a nearby safe place and stay indoors until the shaking has stopped and you are sure exiting is safe.

**If indoors**

- DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.

- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, loadbearing doorway.
- Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

#### **If outdoors**

- Stay there.
- Move away from buildings, trees, streetlights, and utility wires.
- Once in the open, stay there until the shaking stops. The greatest danger exists directly outside buildings, at exits, and alongside exterior walls. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.

#### **If in a moving vehicle**

- Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.

#### **If trapped under debris**

- Do not light a match.
- Do not move about or kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.

#### **After an earthquake**

- Keep calm, switch on the radio/TV and obey any instructions you hear on it.
- Keep away from beaches and low banks of rivers. Huge waves may sweep in.
- Expect aftershocks. Be prepared.
- Turn off the water, gas and electricity.
- Do not smoke and do not light matches or use a cigarette lighter. Do not turn on switches. There may be gas leaks or short-circuits.
- Use a torch.
- If there is a fire, try to put it out. If you cannot, call the fire brigade.
- If people are seriously injured, do not move them unless they are in danger.
- Immediately clean up any inflammable products that may have spilled (alcohol, paint, etc).
- If you know that people have been buried, tell the rescue teams. Do not rush and do not worsen the situation of injured persons or your own situation.
- Avoid places where there are loose electric wires and do not touch any metal object in contact with them.
- Do not drink water from open containers without having examined it and filtered it through a sieve, a filter or an ordinary clean cloth.
- If your home is badly damaged, you will have to leave it. Collect water containers, food, and ordinary and special medicines (for persons with heart complaints, diabetes, etc.)



- Do not re-enter badly damaged buildings and do not go near damaged structures.

## **Flood**

**Before a Flood to prepare for a flood**, you should:

- Avoid building in a flood prone area unless you elevate and reinforce your home.
- Elevate the furnace, water heater, and electric panel if susceptible to flooding.
- Install "check valves" in sewer traps to prevent floodwater from backing up into the drains of your home.
- Contact community officials to find out if they are planning to construct barriers (levees, beams, floodwalls) to stop floodwater from entering the homes in your area.
- Seal the walls in your basement with waterproofing compounds to avoid seepage.

**During a Flood If a flood is likely in your area**, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.

If you must prepare to evacuate, you should do the following:

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

### **Driving Flood Facts**

The following are important points to remember when driving in flood conditions:

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.

### **After a Flood**

The following are guidelines for the period following a flood:

- Listen for news reports to learn whether the community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a vehicle.
- Stay away from downed power lines, and report them to the power company.
- Return home only when authorities indicate it is safe.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.

- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.

### **Flood: Know Your Terms**

Familiarize yourself with these terms to help identify a flood hazard:

- **Flood Watch:** Flooding is possible. Tune in to Local Radio for Weather Services, commercial radio, or television for information.
- **Flash Flood Watch:** Flash flooding is possible. Be prepared to move to higher ground; listen to Local Radio for Weather Services, commercial radio, or television for information.
- **Flood Warning:** Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.
- **Flash Flood Warning:** A flash flood is occurring; seek higher ground on foot immediately.

### **You and Your Family**

#### **Dos**

- Educate your children wife and other family member in respect of natural and manmade disasters and other crises. In case of your being unaware, take help of Civil Defense and Home Guard organization and other NGOs. Develop habit in you and your children to spare 1% of you busy time to think about Individual security and security interests.
- Keep the phone numbers of the local police station, police control rooms, fire stations, and schools, colleges, TV station, All India Radio, ambulance services and Chemists for emergency use.
- Guide children to remain at schools in emergency.
- Prepare an emergency kit of items and essentials in the house including essential documents and valuables.
- Store food and water for survival in case you had a pre-warning.
- Any suspicious incidents observed be reported to police on 100. Callers do not have to give their identity on the phone. Information of immediate use be conveyed to control rooms to help early relief.
- Carry your identity card, residential telephone number or address or personal card with you. Have your blood group and any medical allergies recorded with you.
- Check information in case of disasters and crises from Ward, Civil Defense / Home Guard, and BMC, TV and All India Radio Control room.
- Learn to fight such emergencies untidily.
- Support authorities and NGOs.
- Identify scooters, cars, vehicles parked in society and identify vehicles which are unknown and parked for long.
- Organize societies and muhalla committees to educate people.

#### **Don'ts**

- Do not encourage rumors.
- Do not blame any community for any crises.
- Do not encourage communal hatred in such situations.

### **Your Place of Work**

#### **Dos**

- Your mode of travel by car, bus, train and taxi be known to your people.
- High rises buildings must check their electric and water supplies and organize periodic mockup drills for fire fighting and escape routes.
- Drills for bomb blast, threats be organized and practiced.
- Air/Helicopter evacuation be examined and organized from selected rooftops of high rises.
- Firefighting equipment be kept serviceable and periodic check is effected.
- Office societies be organized and prepared to coordinate such emergencies of fire brigade, medical help and other assistance. Such people be nominated and they should guide relief.
- Everyone must know use of fire extinguisher in emergency.
- Security guards are trained to coordinate in such crises.

#### **Dos**

### **During Transit**

- Be concerned and develop habit of surveillance when out of our house. Check your seat in cinema hall, train, bus and air. Have you observed a bird, she jumped around and looks in all directions before selecting a spot on a tree for her security. Do we learn anything from this bird instinct?
- Look for the objects, baggage, at bus stand, railway stations, compartments, airport, which is unclaimed.
- Unknown vehicles parked at airports, Railway Stations and bus stands have to be kept under surveillance by common citizens, and this alertness may help authorities.
- Bus, trains and airlines passengers who notice any suspicious behavior of co-passengers, be brought to the notice of officials,
- Every passenger should identify a friend or relations residence in case of requirement of staying away in emergency. The family should know about such a plan.

#### **Don'ts**

- Do not touch any suspicious object. Report to concerned people.



- Do not crowd the object.
- Passengers should not accept parcels from unknown persons in hurry while boarding train or bus.

### **C 8.6 Detailed Maps**

Detailed maps will be prepared in line with the applicable hazards, existing vulnerabilities, and available resources / potential capacities.

# **Annexure-33**

## **Risk Management Plan**

**Ipca Laboratories Limited Dewas**  
**ON-SITE EMERGENCY RESPONSE PLAN**

**Annexure- XI**

**Hazard Identification & Risk Assessment (HIRA) for handling & storage of chemicals**

S. N.	Name of chemical	Mode of storage	NFPA Hazard ranking				R/NR /E	Risk S/P	Consequences effect	Existing safe guard	Residual risk	Emergency control measures
			Health	Flammability	Reactivity	Special						
1.	Acetone	Store in a cool, dry, ventilated area	2	3	0	-	NR	Human fatality	Do not handle or open near flame, sources of heat, or sources of ignition. Protect material from direct sunlight. Wear personal protective equipment. Use only in well ventilated areas.	Provision of dyke wall for spill containment. Provision of eye wash cum emergency shower near tank. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team
2.	Thionyl chloride	Tank	4	0	2	Reacts violently or explosiv	NR	Human fatality	Handle with gloves. Gloves must be inspected prior to use. Avoid breathing dust/ fume/	Provision of dyke wall for spill containment. Provision of eye wash cum emergency shower near tank. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team



**Ipca Laboratories Limited Dewas**  
**ON-SITE EMERGENCY RESPONSE PLAN**

						ely with wat er.			gas/ mist/ vapours/ spray. P264 Wash skin thoroughly 1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's after handling. P270 Do not eat, drink or smoke when using this product			
3.	Potass ium carbon ate		2	0	0	-	NR	Huma n fatality	Contact may causes eyes, skin severe burn. Mild Irritation to nose & lungs	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's		Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team

**Ipca Laboratories Limited Dewas**  
**ON-SITE EMERGENCY RESPONSE PLAN**

4.	Caustic Soda /lye	Bags	3	0	1	-	NR	Human fatality	Contact may causes eyes, skin severe burn. Mild Irritation to nose & lungs	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
5.	Caustic lye	Tank	3	0	1	-	NR	Human fatality	Contact may causes eyes, skin severe burn. Mild Irritation to nose & lungs	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
6.	Hydrochloric Acid-33%	Tank	3	0	0	-	NR	Human fatality	Contact may causes eyes, skin burn. Irritation to nose & lungs	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
7.	Sulphuric Acid	Tank	3	0	2	-	NR	Human fatality	Contact with skin & eyes causes severe burn	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
8.	Denatured Spirit	Tank	2	4	1	-	NR	Property damage/ Human fatality	Prolonged contact with skin causes burns, eyes contact corneal injury. Inhalation cause nausea, drunk	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's 4. Provision of eathing bonding on joint, flame arrester on vent pipe.	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.

**Ipca Laboratories Limited Dewas**  
**ON-SITE EMERGENCY RESPONSE PLAN**

9.	Diethyl amine	Drum	2	3	1	-	NR	Property damage/ Human fatality	Inhalation causes sore throat, coughing & breathlessness. Prolonged contact with causes skin burn.	1. Provision of covered shade 2. Provision of eye wash cum emergency shower. 3. Provision respiratory & non respiratory type PPE's 4. Provision of earthing with meta rod is also available for dispensing of material.	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
10.	Toluene	U.G Tank	2	3	0	-	NR	Property damage/ Human fatality	High conc. Cause irritation of eyes, headache, fatigue, drowsiness. Chance of fire.	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's 4. Provision of earthing bonding on joint, flame arrester on vent pipe.	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
11.	Methanol	U.G Tank	1	3	0	-	NR	Property damage/ Human fatality	High conc. Cause irritation of eyes, headache, fatigue, drowsiness. Chance of fire	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank. 3. Provision respiratory & non respiratory type PPE's 4. Provision of earthing bonding on joint, flame arrester on vent pipe.	-	Fire hydrant system/ SCBA set/OHC with Doctor / Ambulance/ rescue team.
12.	Iso Propanol	Drums	1	3	0	-	NR	Property damage/	Cause mild irritation of eyes & upper respiratory	1. Provision of dyke wall for spill containment. 2. Provision of eye wash cum emergency shower near tank.	-	Fire hydrant system/ SCBA set/OHC with Doctor /





Annexure-34

Solar Lights





## Annexure-35

### CER Activity Photograph





# **Annexure-36**

**CTO**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Collectionony  
Paryawaran Parisar, Bhopal - 16 (M.P.)  
Tele : 0755-2466191, Fax-0755-2463742

RED - LARGE Outward No:114471,10/01/2022	CCA-Expansion & Hazardous authorization	CONSENT NO: *** Consent No:AWH-55002	PCB ID: 128304
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To,

The Occupier,  
M/s IPCA Laboratories Limited,  
Plot no. 16-A, 16-B, 17 -A, 17-B, 18- A, 18-B, 19-A, 19-B,  
20-A, 20-B, 20-C, 21-A, 21-B, 21-C & 22,  
Industrial Area No. 1,  
Distt. Dewas – 455001 (M.P.)

Sub: Grant of consent to operate under section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016- reg.

Ref: Your application receipt no. CCA-Fresh-1103046-27/12/2021-AWH.

With reference to your above application for consent to operate and authorization has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to 31/01/2024, & hazardous authorization up to 31/01/2027 subject to the fulfillment of the terms & conditions, enclosed with this letter.

### SUBJECT TO THE FOLLOWING CONDITIONS:-

- Location: Plot no.16-A, 16-B, 17 -A, 17-B, 18- A, 18-B ,19-A, 19-B, 20-A, 20-B, 20-C ,21-A, 21-B , 21-C & 22, Industrial Area No. 1, Distt. Dewas – 455001 (M.P.)
- The capital Investment: Rs. 175.82 Crores.
- Product and Production Capacity in Phase 1:

S. No.	Products	Name of Products	Capacity (Quantity /Year)
1	API	Allopurinol, Amlodipine Besylate, Amodiaquine Base, Amodiaquine HCl, Aripiprazole, Atovaquone, Bezbromorone, Bupropion, Chloroquine phosphate, Chloroquine sulphate, Chlorothalidone, Duloxitine, Escitalopram, Etodolac, Famotodine, Flumequene, Gliclazide, Hydroxy Chloroquine sulphate, Lamotrigine, Levofloxacin, Lumefantrine, Valsartan, Metaclopramide HCl, Nifedipine, Ondensatron, Piperazine Phosphate, Pregabline, Primaquine Phosphate, Proguanil Base, Telmisartan, Trazadole, Losartan Potassium, Furseimide	800 MT M.T.
2	API - Intermediate	4,7-Dichloroquinoline (4,7 DCQ), 3- Aminopyrazole-4-carboxamide (3 APC), 2-Butyl -4-Chloro-5-Formyl Imidazole (BCFI), OTBN, MEP, HNDA, NDA, Lasamide, DSA, MV-1 HCl, CPSP, MKI, RoBo 7, Clopi-II, AABO, 4-HOK, PTU, 4- TBD, 4-HBS, Ritnilic acid	700 MT M.T.
3	R & D	-	10.000 M.T.

N

ote: -For any change in above Product and Production Capacity industry shall obtain fresh consent from the Board.

The validity of the consent is up to 31/01/2024 & hazardous authorization up to 31/01/2027 has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office 6 months before expiry of the consent. Board reserves the right to amend/cancel / revoke the above condition in part or whole as and when required.

Enclosures:-\*Conditions under Water Act\* Conditions under Air Act\*Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016\* General conditions

Copy to:

- Regional Officer, M.P. Pollution Control Board, Dewas for information.
- Collector, District Dewas for information please.

Signature Not Verified

Digitally Signed by : A. A  
Mishra, Member Secretary  
Date: 10/01/2022 06:22:33 PM

ACHYUT ANAND MISHRA  
Member Secretary

Digitally Signed with Aadhaar

(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # LF8NO3OND4



## Consent Order

### CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974:-

- The quantity of trade effluent of the unit shall not exceed **198 KL/day** and the daily quantity of sewage of the unit shall not exceed **15.000 KL/day**.
- Trade Effluent Treatment:-** The applicant shall provide effluent treatment plant to achieve following standards -

pH	Between	6.0 – 8.5
Suspended Solids	Not exceed	100 mg/l.
BOD <sub>3</sub> Days 27°C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
Chromium (Cr <sup>6+</sup> )	Not Exceed	0.10 mg/l.
Lead	Not exceed	0.10 mg/l.
Cyanide	Not Exceed	0.10 mg/l.
TDS	Not exceed	2100 mg/l.
Chlorides	Not exceed	1000 mg/l.
Mercury	Not exceed	0.01 mg/l.
Arsenic	Not Exceed	0.20
Phenolics (C <sub>6</sub> H <sub>5</sub> OH)	Not exceed	1.0 mg/l.
Sulphides (as S)	Not exceed	2.0 mg/l.
Phosphate (as P)	Not exceed	5.0 mg/l.

For other parameters general standards of discharge as notified under EP Act 1986 shall be applicable.

- Sewage Treatment:-** The applicant shall provide sewage treatment plant to achieve following standards-

pH	Between	6.5 – 9.0
Total Suspended Solids	Not exceed	100 mg/l.
BOD <sub>3</sub> Days 27°C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
Fecal Coli form (MPN/100ml)	Not exceed	1000

S. No.	Water Code (Qty in KLPD - Kilo Ltr per day)	WC : 473.000	WWG : 213.000	Water Source
1.	Boiler	56.000	9.000	SIDC
2.	Cooling Water	185.000	27.000	Recycled
3.	D.M Water Plant	190.000	142.000	SIDC
4.	Domestic Purpose	16.000	15.000	SIDC
5.	Floor / Utensils Washing	20.000	20.000	SIDC
6.	Plantation / Horticulture	6.000	0.000	SIDC/Recycle d

- The combined effluent shall be treated up to prescribed Standards and Reuse in the process, for cooling and for green belt development/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent shall be discharged outside of industry/unit premises.
- Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be properly maintained for category wise consumption of water for Industrial cooling/boiler feed, process & domestic purposes and data shall be submitted online through XGN monthly. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrak/statements.





## **Consent Order**

6. Any change in production capacity, process, fuel used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board
7. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent.
8. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.
9. **Compilation of Monitoring data:-**
  - i. Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.
  - ii. Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.
  - iii. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.
10. **Recording of Monitoring activities and results:-**
  - i. The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.
  - ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:
    - (i) The date, exact place and time of sampling
    - (ii) The dates on which analysis were performed
    - (iii) Who performed the analysis?
    - (iv) The analytical techniques or methods used
    - (v) The result of all required analysis
  - iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shall include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.
  - iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.
11. **Reporting of Monitoring Results:-**

Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.
12. **Limitation of discharge of oil Hazardous Substance in harmful quantities:-**

The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.
13. **Limitation of visible floating solids and foam:-**

During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.



## **Consent Order**

### **14. Disposal of Collected Solid waste/sludge:-**

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous and Other Waste (Management and Trans boundary Movement) Rules, 2016 and other solids sludge, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water. Any live fish, Shell fish or other animal Collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

### **15. Provision for Electric Power Failure:-**

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

### **16. Prohibition of Bypass of technical facilities:-**

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent is prohibited except:

- i. Where unavoidable to prevent loss of life or severe property damage, or
- ii. Where excessive Storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

17. Industry shall submit the information online through XGN in reference to compliance of consent conditions.

### **Additional Water condition (if any):-**

1. The industry shall maintain flow meters at raw water consumption, RO feed, RO permeate, RO reject, MEE feed, MEE condensate, Water recycling point etc. and report the same to the Board.
2. The industry shall install advance process technologies for reduction of effluent and waste generation from the unit.
3. The industry shall continue to re-utilize the MEE condensate completely in process/ utility.
4. Treatment of other effluents such as plant washing, leakages, boiler blow down, softener regeneration, DM plant, regeneration, plate heat exchangers cleaning etc in the ETP and use for process/utilities.
5. The industry shall make all possible protection arrangements for control of pollution in nearby nallah/water resources from the industry.

### **CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981:-**

1. The applicant shall operate & maintain air pollution control facility continuously so as to achieve the level of pollutants.

Name of section	capacity	Stack height (m)	Fuel	Consp-Unit	Control equipment to be installed	P.M, SO <sub>x</sub> , NO <sub>x</sub> (Mg/Nm <sup>3</sup> )
D.G. Sets	1X 1000 KVA	30	H.S.D	250 LPH	Acoustic enclosure	As per MoEF&CC & CPCB notification
Boiler	6 TPH	30	Solid Fuel	1500 Kg/Hr	Air pre heater, Bag filter, Green belt, Multi cyclone	P.M.-150
Neutralization			3+ Building height		Green belt, Scrubber	As per MoEF&CC & CPCB notification
Reaction Vessels			3+ Building height		Green belt, Scrubber	
Reaction Vessels			3+ Building height		Green belt, Scrubber	

*Note- Industry shall inform to the Board for any addition or removal of source of air/water pollution and control equipment.*



## **Consent Order**

2. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis: The Ambient air quality norms are prescribed in MoEF gazette notification no. **GSR/826(E)**, dated: **16/11/09**. **Some of the parameters are as follows:**
- |  |   |
|--|---|
| a. Particulate Matter (less than 10 micron)          | - 100 $\mu\text{g}/\text{m}^3$ microgram/cubic meter ( $\text{PM}_{10}$ $\mu\text{g}/\text{m}^3$ 24 hrs. basis) |
| b. Particulate Matter (less than 2.5 micron)         | - 60 $\mu\text{g}/\text{m}^3$ ( $\text{PM}_{2.5}$ $\mu\text{g}/\text{m}^3$ 24 hrs. basis)                       |
| c. Sulphur Dioxide [ $\text{SO}_2$ ] (24 hrs. Basis) | - 80 $\mu\text{g}/\text{m}^3$   |
| d. Nitrogen Oxides [ $\text{NO}_x$ ] (24 hrs. Basis) | - 80 $\mu\text{g}/\text{m}^3$   |
| e. Carbon Monoxide [ $\text{CO}$ ] (8 hrs. Basis)    | - 2000 $\mu\text{g}/\text{m}^3$   |
3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB (A) during day time and 70 dB(A) during night time.
4. Industry shall maintain each stack port hole with safe platform of 1 meter width with support & spiral ladder/ Stepped ladder with hand rail up to monitoring platform as per specifications given in part-III emission regulation of CPCB.
5. The industry shall make and maintain the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.
6. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.
7. The industry shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises.
8. All the internal roads shall be maintained in good condition to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.
9. Industry shall take effective steps for extensive tree plantation within or around the industry/unit premises for general improvement of environmental conditions and as stated in additional condition.





## Consent Order

**M.P. Pollution Control Board**  
 E-5, Arera Collectionony  
 Paryawaran Parisar, Bhopal - 16 (M.P.)  
 Tele : 0755-2466191, Fax-0755-2463742

### CONDITIONS PERTAINING TO HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANS-BOUNDARY MOVEMENT) RULES, 2016:-

#### **FORM-2**

[See rule 6(2)]

#### **FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES**

- Number of authorization and date of issue: **Please refer in red ink at bottom of page.**
- Reference of application (No. and date) : **CCA-Fresh -1103046-27/12/2021-AWH.**
- The Occupier of **M/s IPCA Laboratories Limited** is hereby granted an authorization based on the enclosed signed inspection report for generation, Collection, reception, Storage, transport, Reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at **Plot no. 16-A, 16-B, 17 -A, 17-B,18- A, 18-B ,19-A, 19-B, 20-A, 20-B, 20-C ,21-A, 21-B , 21-C & 22, Industrial Area No. 1, Distt. Dewas – 455001 (M.P.).**

#### Details of Authorization

S. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity ( per annum)
1	Process Residue and wastes I -28.1	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	400.000-M.T
2	Contaminated cotton rags or other cleaning materials I -33.2	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	5.000-M.T
3	Spent carbon I -28.3	Co-Processing, Collection, Disposal Thru TSDF ,Preprocessing, Storage	400.000-M.T
4	Spent Catalyst I -28.2	Collection, Storage, Thru Authorized Recycler	5.000-M.T
5	Date-expired products I -28.5	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	10.000-M.T
6	Chemical sludge from waste water treatment I -35.3	Co-Processing, Collection, Disposal Thru TSDF, Processing, Storage	600.000-M.T
7	Any process or distillation residue I -36.1	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	120.000-M.T
8	Off Specification Products I -28.4	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	10.000-M.T
9	Spent Solvents I -28.6	Collection, Reuse, Sale to authorized recycler, Storage	680.000-M.T
10	Used or Spent Oil I -5.1	Collection, Reuse, Sale to authorized recycler, Storage	4.000-M.T
11	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes I -33.1	Collection, Decontamination, Reuse, Sale to authorized recycler, Storage, Thru Authorized Recycler	100.000-M.T
12	Corrosive II -C2	Collection, Storage, Thru Authorized Recycler	400.000-M.T
13	Spent Carbon or filter medium I -36.2	Co-Processing, Collection, Disposal Thru TSDF, Preprocessing, Storage	5.000-M.T
14	Spent ion exchange resin containing toxic metals I -35.2	Co-Processing, Collection, Disposal Thru TSDF ,Processing, Storage	1.000-M.T

- The authorization is valid for a period of five years i.e. from dated 01/02/2022 to 31/01/2027.
- The authorization is subject to the following general and specific conditions:



## **Consent Order**

### **A. General conditions of Authorization:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or Reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

### **B. Specific conditions:**

1. The industry shall display the information on hazardous waste generated on notice board of size 6' x 4' (in Hindi & English) outside the unit main gate along with quantity and nature of hazardous chemicals being handled in the plant, including wastewater, air emission and hazardous wastes.
2. The Industry shall maintain the records of hazardous wastes as per the Form-3 of rule 6(5) and should online submit the annual return in Form No.4 as per the rule 6(5) to this office on or before 30th day of June of every year for the preceding period April to March.
3. In the event of any accident due to handling of hazardous wastes, the authorized person must inform immediately to the Regional Office & Head office of the board on Fax/telephone/emailit\_mppcb@rediffmail.com about the incident and detail report should be sent in Form No. 10 as per rule -22 of Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
4. Packing, Labeling & Transportation of Hazardous wastes:-
  - (i) The occupier or operator of the Treatment, Storage and Disposal Facility or recycler shall ensure that the hazardous waste are packaged and labeled, based on the composition in a manner suitable for safe handling, Storage and transport as per the guidelines issued by the Central Pollution Control Board vide - October 2004 & conditions issues from time to time.
  - (ii) The labeling and packaging shall be easily visible and be able to withstand physical conditions and climate factors.
  - (iii) The transport of the hazardous wastes shall be in accordance with the provision of these rules and the rules made by the Central Govt. under the Motor Vehicle Act 1988 and other guidelines issued from time to time in this regard.
  - (iv) In case of transportation of hazardous wastes through a State other than the State of origin or destination, the Occupier shall intimate the concerned State Pollution Control Board before he hands over the hazardous wastes to the transporter.



## **Consent Order**

- (V) The occupier shall provide the transporter with seven copies of the manifest as per the Collectionor codes as per rule 19(1).
- (vi) The occupier shall forward copy 1 (white) to the State Pollution Control Board and in case the hazardous wastes is likely to be transported through any transit State, the occupier shall prepare an additional copy each for intimation to such State and forward the same to the concerned SPCB before he hands over the hazardous wastes to the transporter.
- (vii) No transporter shall accept hazardous wastes from an occupier for transport unless copies 3 to 7 of the manifest accompany it.
- (viii) The transporter shall submit copies 3 to 7 of the manifest duly signed with date to the operator of the facility along with the waste consignment.
- (ix) The industry shall ensure the transportation of the hazardous waste through the MPPCB authorized trucks/tankers provided with the GPS system, Blue Colored with white strip painted as hazardous waste, driver with tenth passed etc as per CPCB guidelines issued in year 2005-06.
5. The occupiers of facilities may Store the hazardous and other wastes for a period not exceeding ninety days and shall maintain a record of sale, transfer, Storage, recycling, recovery, pre-processing, co-processing and utilization of such wastes and make these records available for inspection.
6. The transport of the hazardous wastes shall be in accordance with the provision of these rules and the rules made by the Central Govt. under the Motor Vehicle Act 1988 and other guidelines issued from time to time in this regard.
7. If the industry comes in such a category where insurance under Public Liability Insurance Act, is necessary, the industry shall comply with provision and submit a copy of the policy to the Board.
8. The information regarding quantity of hazardous wastes generated and its analysis report should be sent to the Board online quarterly.
9. Hazardous Waste Storage Site & Danger signboard shall be provided with all fire safety & emergency safety devices at the Storage site.
10. The authorized person should inform the name and address of the contact person responsible for hazardous waste management.
11. The industry shall make arrangements for Store of hazardous waste/non hazardous solid waste in cover shed with pucca floor area.

### **GENERAL CONDITIONS:-**

1. The non-hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

### **Non Hazardous Solid Waste:-**

Type of waste	Quantity(M.T./Month)	Disposal
MS Barrels	25.000M.T	As per CPCB/MoEFCC guidelines
Plastic Liners	8.000M.T	
PVC Waste	8.000M.T	
Steel Scrap	250.000M.T	
Broken Furniture	3.000M.T	
Coal Ash	1950.000M.T	
Alluminium Scrap	8.000M.T	
Glass Waste	6.000M.T	
Fiber Drums	15.000M.T	
Wooden Scrap	3.000M.T	
Corrugated Box	6.000M.T	
Electric Wires / Cables	2.000M.T	
Copper Scrap	1.000M.T	
Paper Cutting	5.000M.T	
Rubber Pipe	3.000M.T	
PVC Carboy	5.000M.T	



## **Consent Order**

2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:
  - a. To inspect raw material Stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.
  - b. To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.
  - c. To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.
  - d. To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,
  - e. To sample at reasonable times any discharge or pollutants.
3. This consent/authorization is transferable, in case of change of ownership/management and addresses of new Owner/partner/Directors/proprietor should immediately apply for the same.
4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.
5. Industry shall maintain separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non-functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month.
6. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 or Authorization under the provisions of Hazardous and Other Waste (Management and Trans boundary movement) Rules, 2016, only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.
7. Balance consent/authorization fee, if any shall be recoverable by the Board even at a later date.
8. The applicant shall submit such information, forms and fees as required by the board not letter than 180 day prior to the date of expiration of this consent/authorization.
9. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.
10. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to the following:-
  - (a) Violation of any terms and conditions of this Consent.
  - (b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.
11. On violation of any mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the industry.

### **Additional Conditions:-**

1. The industry shall comply with the updated norms/directions/acts/rules/guidelines issued by the Hon'ble Courts/Tribunals/MoEFCC /MPPCB time to time.
2. The industry shall ensure the arrangements for disposal of above Non Hazardous solid waste generated from the unit to the authorized venders only.
3. The industry shall maintain the record of generation and disposal of the non hazardous wastes and same shall be produced before the officers of Pollution Control Board during inspection or visit.





## **Consent Order**

**M.P. Pollution Control Board**  
E-5, Arera Collectionony  
Paryawaran Parisar, Bhopal - 16 (M.P.)  
Tele : 0755-2466191, Fax-0755-2463742

4. The industry shall submit contract document with unit for accepting hazardous waste for Co-processing and Pre-processing before sending hazardous waste.
5. The industry shall submit valid consent and hazardous waste authorization of unit which will Pre-Process / Co-process hazardous waste before sending hazardous waste.
6. The industry shall submit details of vehicle to be used in transportation of hazardous waste before sending hazardous waste for Co-Processing and Pre-Processing.
7. The industry shall intimate in advance to MPPCB and other PCB/PCC, if hazardous waste has to be transported through other state or has to be transported other state for Pre-processing/ Co-Processing.
8. This consent is granted in respect of Water pollution control Act, 1974 & Air Pollution Control act, 1981 or Authorization under the provisions of The Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 only and does not relate to any other Department/Agencies. License/NOC required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per their Act / Rules.
9. PP shall install online PTZ camera, online Flow meter with connectivity to server of the CPCB & MPPCB.

Consent and authorization as required under the Water (Prevention & Control of Pollution) Act, 1974, The Air (Prevention & Control of Pollution) Act, 1981 and the Authorization under Hazardous and Other Waste (Management and Trans boundary Movement) Rules, 2016, is granted to your industry subject to fulfillment of all the conditions mentioned above. **For renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent and authorization.** The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.



(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # LF8NO3OND4

**ACHYUT ANAND MISHRA**  
Member Secretary

**Consent No:AWH-55002**

e-Signed (Physical Signature NOT requires)

# **Annexure-37**

## **PESO License**

**प्ररूप XV**  
**(प्रथम अनुसूची का अनुच्छेद 6 देखिए)**  
**FORM XV**  
**(see Article 6 of the First Schedule)**

**अधिष्ठापनों में पेट्रोलियम के आयात और भंडारकरण के लिए अनुज्ञप्ति**  
**LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION**

अनुज्ञप्ति सं. (Licence No.) : **P/CB/MP/15/2951(P511288)**

फीस रूपए (Fee Rs.) **16450/- per year**

**M/s. IPCA Laboratories Ltd, Plo 16, DIC industrial Area No -1 Dewas, Dewas, Dewas, Taluka: Dewas, District: DEWAS, State: Madhya Pradesh, PIN: 455001** को केवल इसमें यथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम **278.40 KL** आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या **P/CB/MP/15/2951 (P511288)** तारीख **08/03/2022** जो कि इससे उपाबद्ध हैं, में दिखाए गए स्थान पर भण्डारकरण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अतिरिक्त शर्तों के अधीन रहते हए, यह अनुज्ञप्ति अनूदत्त की जाती हैं ।

Licence is hereby granted to **M/s. IPCA Laboratories Ltd, Plo 16, DIC industrial Area No -1 Dewas, Dewas, Dewas, Taluka: Dewas, District: DEWAS, State: Madhya Pradesh, PIN: 455001** valid only for the importation and storage of **278.40 KL** Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No **P/CB/MP/15/2951(P511288)** dated **08/03/2022** attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुज्ञप्ति 31st day of December **2024** तक प्रवृत्त रहेगी ।  
The Licence shall remain in force till the 31st day of December **2024**

पेट्रोलियम का विवरण /Description of Petroleum	अनुज्ञप्त मात्रा (किलोलीटरों में) /Quantity licenced in KL
वर्ग क प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	<b>240.00 KL</b>
वर्ग क प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	<b>38.40 KL</b>
वर्ग ख प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	<b>NIL</b>
वर्ग ख प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	<b>NIL</b>
वर्ग ग प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	<b>NIL</b>
वर्ग ग प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	<b>NIL</b>
<b>कुल क्षमता /Total Capacity</b>	<b>278.40 KL</b>

**March 8, 2022**

Jt. Chief Controller of Explosives  
CB, Bhopal

**अनुज्ञप्त परिसरों का विवरण और अवस्थान**  
**DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

अनुज्ञप्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टयां संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: **16A,16B,17A,17B,18A-B,19A,19B,20A,20B,20C,21A-B-C,, DIC Industrial Area No 1, Dewas, Dewas, Taluka: Dewas, District: DEWAS, State: Madhya Pradesh, PIN: 455001** स्थान पर अवस्थित है तथा उसमें निम्नलिखित **6 Under Ground tank(s) for CLASS A and storage shed for non bulk petroleum** सम्मिलित हैं |

The licensed premises, the layout , boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: **16A,16B,17A,17B,18A-B,19A,19B,20A,20B,20C,21A-B-C,, DIC Industrial Area No 1, Dewas, Dewas, Taluka: Dewas, District: DEWAS, State: Madhya Pradesh, PIN: 455001** and consists of **6 Under Ground tank(s) for CLASS A and storage shed for non bulk petroleum** together with connected facilities.

**Note:-This is system generated document does not require signature.**





# **Annexure-38**

## **MVA Checklist**



**Checklist for Vehicle Audit (Two Wheeler)**

Sr. No.	Check Points	OK / Not OK / NA	Remarks / Observations (if any)
1	Regulatory Requirement		
	a. Vehicle Registration Card		
	b. Valid Vehicle Insurance		
	c. PUC Card		
	d. Valid Driving License		
2	Lights		
	a. Head Light		
	b. Tail Light		
	c. Break Light		
	d. Left Indicator		
	e. Right Indicator		
3	Side RearView Mirror		
4	Reflective Strips Front & Back		
5	High Visibility Jacket for Rider (NA)		
6	High Visibility Jacket for Pillion (NA)		
7	Tyre Condition		
	a. Front		
	b. Rear		
8	Leg Guards		
9	Saree Guard		
10	Horn		
11	Brakes		
12	First Aid Kit		
13	Driver Mobile Phone		
14	Vehicle Service Record (NA)		
15	Tool Kit		
16	Main Stand OK		
17	No. of Pillion riders?		
18	Any bag / goods carried along while driving ?		

\_\_\_\_\_  
Auditor Signature

\_\_\_\_\_  
Owner Signature



Security Checks for All Vehicles

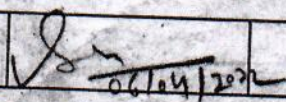
1	Date : 02/04/2022	In Time: 14:05	Out Time: 16:55
2	Vehicle No.	: PB13 BF 8109	
3	Type of Material (Eng./Civil/Stores/BD/RM)	: RM	
4	Name of Transporter	: Vikas Road Carriers Aurangabad	
5	License of Driver available	: Yes/No	
6	Insurance / Fitness	: Yes/No	
7	Registration documents / Permit documents	: Yes/No	
8	Flame Arrestor is fitted properly	: Yes/No	
9	Match Box / Lighter / Bidy / Cigarette / Stove	: Yes/No	
10	Personnel Protective Equipment (Safety Goggle, Helmet & Hand Gloves etc.)	: Yes/No	
11	Pollution under Control certificate (PUC)	: Yes/No	
12	Conductor / Helper available (Age minimum 18 Years)	: Yes/No	
13	Overall Physical Condition of Truck / Tarpaulin (Minimum 03 Tarpaulin for loading Finished Goods in rain season)	: Yes/No	
14	Mobile recovered at gate / Mobile kept at security	: Yes/No	
15	Local rules for entering in to factory premises shall be explained to driver and he should understand / follow them (Safety / Traffic / Parking etc.)	: Yes/No	
16	Vehicle shall not have darkened or painted windows that may obscure visibility	: Yes/No	
17	Wheel chock issued to vehicle driver & concern dept. to ensure its usage	: Yes/No	

Jitendra  
02/04/2022  
Signature, Date & Time

[Signature]  
02/04/2022  
Signature, Date & Time



Tanker Inspection Checklist For Corrosive Chemicals / Solvent  
Road Tankers Carrying Hazardous Chemicals

<b>A. SECURITY CHECKS:</b>			
1	Date : 06/04/2022	In Time : 17:20	Out Time : 21:00
2.	Tanker No.	: MP13WA 8513	
3.	Name of Chemical	: Caustic Soda Fides. (Lye)	
4.	Name of Supplier / Manufacturer	: IPCA Lab. Indore	
5.	License of Driver available		: <input checked="" type="checkbox"/> Yes/No
6.	TREM CARD		: <input checked="" type="checkbox"/> Yes/No
7.	Fire Extinguisher		: <input checked="" type="checkbox"/> Yes/No
8.	Flame Arrestor is Fitted Properly		: <input checked="" type="checkbox"/> Yes/No
9.	Match Box / Lighter / Bidy / Cigarette / Stove / Mobile checked are kept at Security		: <input checked="" type="checkbox"/> Yes/No
10.	Emergency Information Panel Available		: <input checked="" type="checkbox"/> Yes/No
11.	Driver Trained as per Central Motor Vehicle Rules		: <input checked="" type="checkbox"/> Yes/No
12.	Condition of Bottom Valve		: <input checked="" type="checkbox"/> Yes/No
13.	Overall Physical Condition of Tanker		: <input checked="" type="checkbox"/> Yes/No
<b>B. RAW MATERIAL WAREHOUSE CHECKS:</b>			
1.	Any Leakage During Unloading		: Yes/No
2.	Proper Earthing During Unloading		: Yes/No
3.	Personnel Protective Equipment Available		: Yes/No
4.	Proper Supervision During Tanker Unloading		: Yes/No
 Signature, Date & Time (Security Department)		Signature, Date & Name (R.M. Warehouse Department)	



# **Annexure-39**

## **Road Safety SOP**

**Ipca Laboratories Limited, Dewas**  
**Standard Operating Procedure**

Title	Road Safety			Department : HR & A
				SOP No: SOP/HR/2021/012/R00
				Supersedes: Nil
				Page No: 1 of 5
Issue Date	Effective Date	Review Date		
07/01/2022	25/01/2022	24/01/2025		

**1.0 OBJECTIVE:**
**1.1 To lay down the procedure of followings:**

- 1.1.1 Safe driving vehicles.
- 1.1.2 Planning & scheduling of vehicles & drivers audit.
- 1.1.3 Ensuring safety provision of contract / hired vehicles.
- 1.1.4 Provision of road & parking safety as per site condition.
- 1.1.5 Reporting of road incidents.

**2.0 SCOPE:**

- 2.1 All site employee (Ipca, Temporary & Contractors Employees).
- 2.2 All company Vehicles.

**3.0 RESPONSIBILITIES :**
**3.1 Head HR / Admin :**

To ensure implementation of this SOP through Manager Security.

**3.2 Manager Security:**

To conduct vehicles &amp; maintenance respective records.

**3.3 Site EHS :**

To facilitate implementation of this SOP.

**3.4 All Employee :**

To follow safe driving practice and report of road incident with them, if happened.

**4.0 EHS PRECAUTIONS:**

- 4.1 Never drive vehicle when drunk or feeling sleepy.
- 4.2 Keep vehicle updated physically and document wise as well all the time.
- 4.3 Follow all Road Safety Rules/Signage as displayed at road side.

	Prepared By	Checked By		Approved By
Sign				
Date	18/12/2021	21/12/2021	23/12/2021	23/12/2021
Name	GURIKAS	Raveen Fairatla	LAKHAN SINGH BANWARZ	SUNIL ATHARKE
Department	Security	HR & A	EHS	QA

 CONTROLLED COPY NO: 01  
 LOCATION : DEWAS  
 ISSUE DATE : 07/01/2022  
 SIGN.



<b>Ipca Laboratories Limited, Dewas</b>			
<b>Standard Operating Procedure</b>			
<b>Title</b>	<b>Road Safety</b>		
			Department : HR & A
			SOP No: SOP/HR/2021/012/R00
			Supersedes: Nil
Page No: 2 of 5			
<b>Issue Date</b>	<b>Effective Date</b>	<b>Review Date</b>	
07/01/2022	25/01/2022	24/01/2025	

**5.0 PROCEDURE :**
**5.1 General safety :**

5.1.1 All employee shall be trained on defensive driving / safe driving practices to make them aware about following but not limited to:

5.1.1.1 Defensive driving.

5.1.1.2 Fitness of vehicles.

5.1.1.3 Use & importance of helmet / seat belt.

5.1.1.4 Hazard of mobile while driving.

5.1.1.5 Reporting of road incidents.

5.1.1.6 Regulatory requirements related to driving on road etc.

5.2 HR / Training cell shall be plan training to cover all the employees for ensure training on Road Safety / defensive driving.

5.3 Safe driving displays board shall be displayed to pass the massages on safe driving to all employees. Safety poster can be put near parking or at other places where most of the employees can see & read.

**5.4 Night Safety :**

5.4.1 A self glowing yellow strip / radium sticker (max. 3x1 inch. size) shall be pasted on back side of all 2 wheeler (including bicycle) for Night safety.

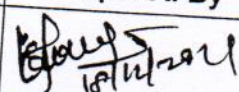
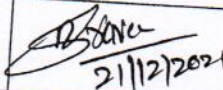
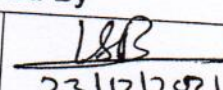
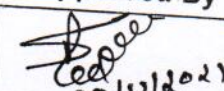
5.4.2 All such self glowing stickers shall be renewed as & when destroyed or removed due to tear & wear. Site Security to check this at least once in 6 months.

**5.5 Personal Vehicle :**

Two wheeler safety self audit checklist shall be use to access safe driving practices by each employee to realize their safe driving behavior whereas this checklist shall be distributed once in 6 months to all to remind them for compliance to the safe driving practices.

**5.6 Company Vehicle :**

The same above checklist shall be use to assess compliance of company owned two wheeler.

	<b>Prepared By</b>	<b>Checked By</b>		<b>Approved By</b>
<b>Sign &amp; Date</b>	 16/12/2021	 21/12/2021	 23/12/2021	 23/12/2021
<b>Department</b>	Security	HR&A	EHS	QA

CONTROLLED COPY  
NO.: 01



<b>Ipca Laboratories Limited, Dewas</b>		
<b>Standard Operating Procedure</b>		
Title	Road Safety	Department : HR & A
		SOP No: SOP/HR/2021/012/R00
Issue Date		Supersedes: Nil
07/01/2022	Effective Date	Page No: 3 of 5
	25/01/2022	Review Date
		24/01/2025

**5.7 Four Wheeler Safety :**

5.7.1 All Company drivers must have a Valid Driving License.

**5.7.2 All Company vehicles must have following :**

5.7.2.1 Valid Registration Certificate (RC).

5.7.2.2 Valid Insurance.

5.7.2.3 Valid vehicle Fitness (if applicable).

5.7.2.4 Valid "Pollution under Control" (PUC) certificate.

5.7.3 All regulatory permits/ document shall be tracked for any renewal due.

**5.7.4 All company vehicles must have following in the vehicles :**

5.7.4.1 Safety instruction board (not for company issued for personal use).

5.7.4.2 First aid kit.

5.7.4.3 Fire extinguisher ABC type - (2-4 kg capacity).

5.7.4.4 Torch/Mobile light.

5.7.4.5 Reflective triangles.

5.7.4.6 Small hammer to break glass (not required in case of head rest in detachable).

5.7.5 All company vehicles must be inspected once in six month as per check list Annexure No. I & II.

5.7.6 Gap identified shall be complied in the respective vehicles. By site admin within 2 weeks time.

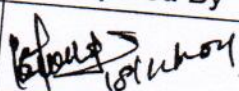
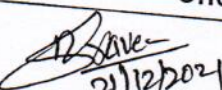
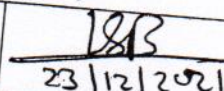
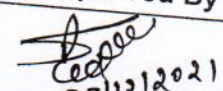
5.7.7 Site admin to make yearly plan to audit driver's behavior while driving. Such audit shall be unannounced & silent audit. However feedback / counseling to be given to respective drivers for his / her improvement at the end of the audit.

5.7.8 Company driving shall always remind passengers to be seat belt before vehicles in motion.

**5.8 Parking safety :**

5.8.1 All authorized vehicles should be parked at designated & identified places only.

5.8.2 Security to ensure all two wheeler is parked on Main Stand.

	Prepared By	Checked By		Approved By
Sign & Date				
Department	Security	HR&A	EHS	QA
		21/12/2021	23/12/2021	23/12/2021

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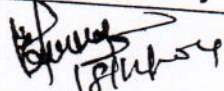
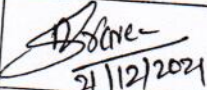
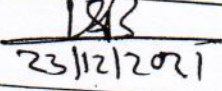
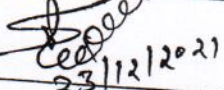


**Ipca Laboratories Limited, Dewas**  
**Standard Operating Procedure**

Title	Road Safety		Department : HR & A
			SOP No: SOP/HR/2021/012/R00
			Supersedes: Nil
			Page No: 4 of 5
Issue Date	Effective Date	Review Date	
07/01/2022	25/01/2022	24/01/2025	

- 5.8.3 In parking areas Site shall display instruction board to park two wheeler on main stand.
- 5.8.4 Employees who are not having helmet shall park their vehicles outside Ipca premises at their own risk.
- 5.9 **Ipca Premises In-side Speed :**  
Maximum speed (10km/hr) shall be displayed at prominent places.
- 5.10 **Contract Vehicles :**
- 5.10.1 **All contract vehicles (Four Wheeler) must fulfill Ipca's minimum Road Safety requirements :**
- 5.10.1.1 Site admin shall have agreement with taxi suppliers for following safety features in Ipca's hired vehicles, but limited to.
- i Working seat belt for driver and all passengers.
  - ii Ready to use Stephanie.
  - iii Valid Driving Licence, P.U.C, Insurance, R.C.
  - iv Fitness of vehicle as per requirement.
- 5.10.2 Security shall checks all contract vehicles, taxi to be used for travelling purpose for the compliance of above requirement.
- 5.10.3 Security shall have right to reject the contract vehicles in case of any non compliance.
- 5.11 **Reporting of incident :**
- 5.11.1 All road incident internal / external shall be reported at OHC to collect data on road safety incidents.
- 5.11.2 All company vehicles incident shall be report as per incident handling SOP of EHS department.
- 11.3 All company vehicles incident shall is investigated within 7 days as per incident investigation procedure.

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Sign & Date				
Department	Security	HR&A	EHS	QA



<b>Ipca Laboratories Limited, Dewas</b>		
<b>Standard Operating Procedure</b>		
<b>Title</b>	<b>Road Safety</b>	Department : HR & A
		SOP No: SOP/HR/2021/012/R00
		Supersedes: Nil
		Page No: 5 of 5
Issue Date	Effective Date	Review Date
07/01/2022	25/01/2022	24/01/2025

**6.0 ANNEXURE(S) / FORMAT(S):**

Annexure No.	Format No.	Title
Annexure-I	SOP/HR/2021/012/F-01-R00	Checklist for Vehicle Audit (Four Wheeler)
Annexure-II	SOP/HR/2021/012/F-02-R00	Checklist for Vehicle Audit (Two Wheeler)

**7.0 ABBREVIATIONS:**

- EHS : Environment Health & Safety
- HR & A : Human Resource & Administration
- PUC : Pollution Under Control
- SOP : Standard Operating Procedure
- PPE : Personal Protective Equipment
- OHC : Occupational Health Center
- NACV : Not Applicable for Contract Vehicle as on Date
- RC : Registration Certificate

**8.0 REFERENCE (S):**

Nil

----- X -----

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	<b>Prepared By</b>	<b>Checked By</b>		<b>Approved By</b>
<b>Sign &amp; Date</b>				
<b>Department</b>	Security	HR&A	EHS	QA



Format No.: SOP/QA/2021/001/F-01-R00

**Ipca Laboratories Limited, Dewas**  
**Standard Operating Procedure**

Title	Road Safety	Department : HR & A	
		SOP No: SOP/HR/2021/012/R00	
Issue Date		Supersedes: Nil	
07/01/2022		Page No: 1 of 1	
Effective Date		Review Date	
25/01/2022		24/01/2025	

**REVISION CARD**

Revision Date	Revision No.	Details of Revision	Reason for Revision	Approved By
23/12/2021	00	New SOP Prepared	New Issue	 23/12/2021

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NO.: 01

Sign & Date	Prepared By	Checked By		Approved By
Department	 Security	 21/12/2021 HR&A	 23/12/2021 EHS	 23/12/2021 QA



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Ipca Laboratories Limited, Dewas  
Human Resource & Administration Department  
Annexure-I

Format No. : SOP/HR/2021/012/F-01-R00

**Checklist for Vehicle Audit (Four Wheeler)**

Date		Time:	
Audit Conducted By			
Designation		Dept.:	

**Special Note :** Please do not disclose to driver that he is under audit observation otherwise he will behave differently.

Vehicle Registration No.	
Vehicle Type (Please Tick)	Car/Jeep/03 Wheeler Tempo/ LMV/ HMV/Ambulance Van
Driver's Name:	

Audit Observations			
Sr. No.	Check Points	Please write : Yes / No / Not Applicable	Remarks
1.0	<b>General Conditions:</b>		
1.1	Is Driver/Operator is looking medically fit for performing his duties?		
1.2	Is driver/Operator influenced by Alcohol during duties?		
2.0	<b>Storage of Items in the vehicle</b>		
2.1	Briefcase, luggage, and other loose items should be kept in trunk or back side or secured.		
2.2	No loose item in parcel tray		
2.3	Check any loose item which can fly into passenger area in the event of accident or sudden stoppage.		
2.4	Valuable left (laptop/ cash) in unattended vehicle should be stored out of sight to discourage theft.		
2.5	No explosive/ fireworks / weapons stored or transported in co. vehicle.		
2.6	For 2 wheeler: material stored in the box / container attached to the bike , No loose material on handle		
3.0	<b>Parking of Vehicle</b>		
3.1	Is vehicle is parked is in right position & right direction?		

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Ipca Laboratories Limited, Dewas  
Human Resource & Administration Department  
Annexure-I

Format No. : SOP/HR/2021/012/F-01-R00

**Checklist for Vehicle Audit (Four Wheeler)**

3.2	Is hand brakes is applied & key removed?		
3.3	Paring of vehicle in secure location or vehicle doors are locked.		
4.0	<b>While Driving</b>		
4.1	4 wheeler : Wearing seat belt by all passengers		
4.2	2 wheeler: Use of Crush helmet with visors		
4.3	2 wheeler: Use of high visibility jacket		
4.4	Non uses of mobile / text messaging devise / smart phone/ headphone / high volume in music system while driving.		
4.5	Is there any overtaking? No overtaking in case of heavy vehicle.		
4.6	Use of indicators when turn Left or Right?		
4.7	Maintain adequate safe distance / cushion from other vehicle		
4.8	Use of wipers with head Light?		
5.0	<b>Follow Driving speed as below:</b>		
5.1	On Plant / factory road: 10 Kmph		
5.2	On Public roads: within city limit as per local traffic rules.		
5.3	Intercity highways: Legal limit or 80 kmph whichever is less		
5.4	On roads without speed limit (village/ rural Rea) : 30 kmph		
5.5	Two wheeler not to exceed 50 kmph any time.		
5.6	On village roads/ rural area: 10-20 kmph		
5.7	Adjusting speed according to visibility		
6.0	<b>Reversing Observation:</b> Checked the rear clearance, sound horn, check rear view & both side mirrors, reversed slowly.		
7.0	<b>Refueling of Motor vehicle</b>		
7.1	Turn off the engine, set the parking break, and disable any source of ignition if any.		
7.2	Not use of mobile phone near dispensing unit.		

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Ipca Laboratories Limited, Dewas  
Human Resource & Administration Department  
Annexure-I

Format No. : SOP/HR/2021/012/F-01-R00

**Checklist for Vehicle Audit (Four Wheeler)**

7.3	Not smoke/ light matches or use lighter while refueling at the pump.		
	Any Other		
8.1	Is there any damage to vehicle?		
8.2	Is there any other observations?		
Audit observations are discussed with Driver for his view on further improvement.			
Driver's reaction / comment during your feedback:			
Auditor's Signature		Date	

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Ipca Laboratories Limited, Dewas  
Human Resource & Administration Department  
Annexure-II

Format No. : SOP/HR/2021/012/F-02-R00

Checklist for Vehicle Audit (Two Wheeler)

Sr. No.	Check Points	OK / Not OK / NA	Remarks / Observations (if any)
1	Regulatory Requirement		
	a. Vehicle Registration Card		
	b. Valid Vehicle Insurance		
	c. PUC Card		
	d. Valid Driving License		
2	Lights		
	a. Head Light		
	b. Tail Light		
	c. Break Light		
	d. Left Indicator		
	e. Right Indicator		
3	Side Rear View Mirror		
4	Reflective Strips Front & Back		
5	High Visibility Jacket for Rider (NA)		
6	High Visibility Jacket for Pillion (NA)		
7	Tyre Condition		
	a. Front		
	b. Rear		
8	Leg Guards		
9	Saree Guard		
10	Horn		
11	Brakes		
12	First Aid Kit		
13	Driver Mobile Phone		
14	Vehicle Service Record (NA)		
15	Tool Kit		
16	Main Stand OK		
17	No. of Pillion riders?		
18	Any bag / goods carried along while driving ?		

Auditor Signature

Owner Signature

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NO.: 01



# Annexure-40

## CAAQMS PHOTOGRAPH



# **Annexure-41**

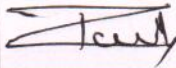
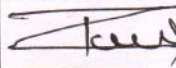
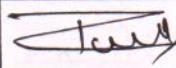
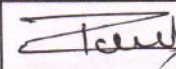
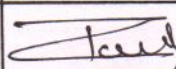
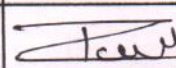
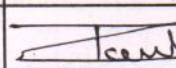
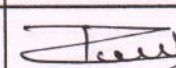
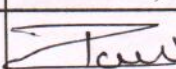
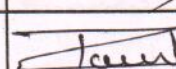
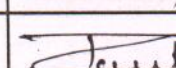
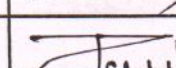
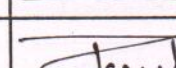

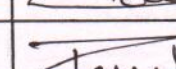
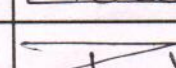
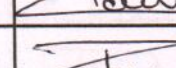
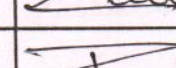
## **Noise Monitoring**



ANNEXURE-I

Format No. : SOP/EHS/2021/003/F-01-R00

**NOISE MONITORING RECORD****04**

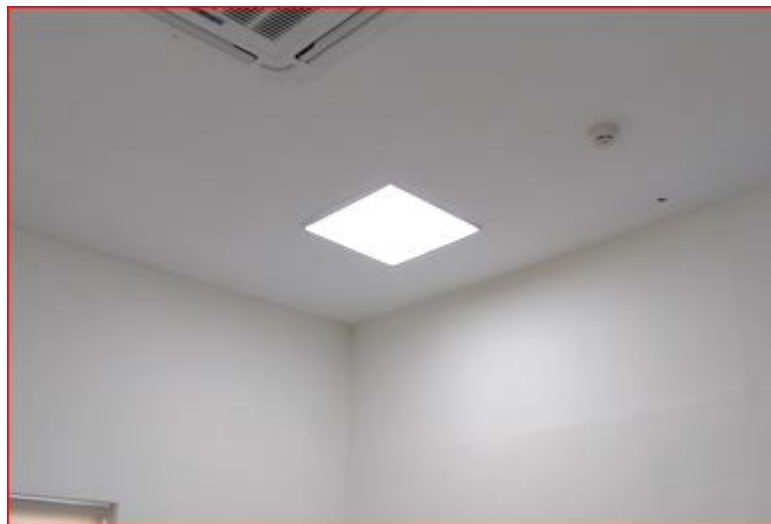
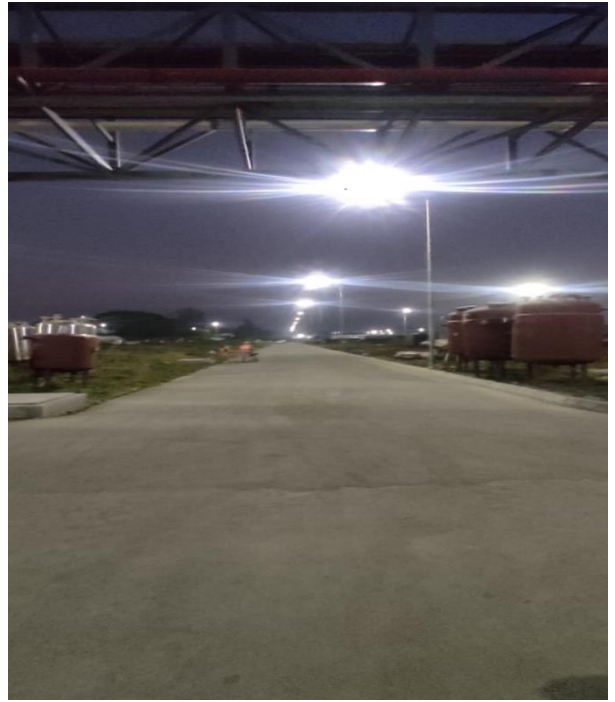
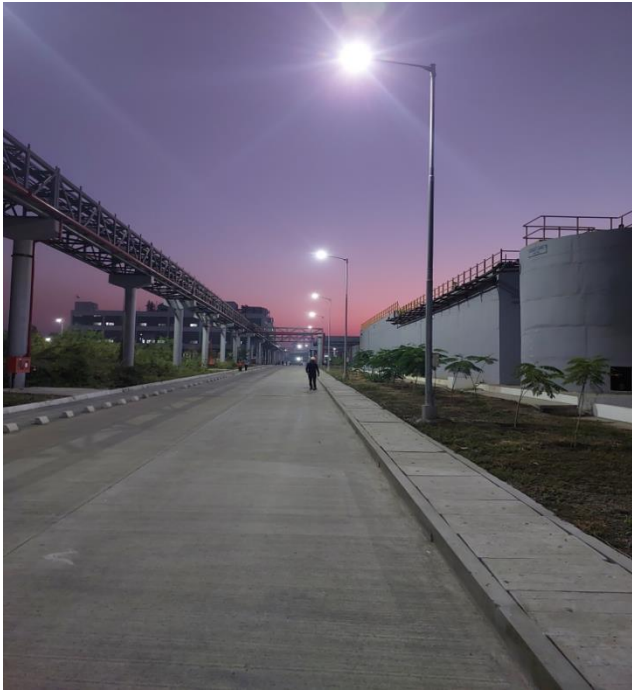
Sr. No.	Date	Plant	Location	Day/night reading	Noise Level	Remark	sign.
19.	19/05/2022		Boiler Area.	Day.	72 dB	-	
20.	19/05/2022		Scrap Yard	Day	51 dB	-	
21.	19/05/2022	Block-II	Valsartan Ground Floor	Day	74.8 dB	-	
22.	19/05/2022	Block-II	Valsartan 5 <sup>th</sup> Floor	Day.	73.6 dB	-	
23.	19/05/2022	Block-II	Valsartan 1 <sup>st</sup> Floor	Day.	75.3 dB	-	
24.	19/05/2022		PCC Room	Day.	66.3 dB	-	
25.	19/05/2022		HT Yard	Day.	73.6 dB	-	
26.	19/05/2022		Canteen	Day.	73.9 dB	-	
27.	19/05/2022		main gate	Day.	59 dB	-	
28.	19/05/2022		Admin	Day.	46 dB	-	
29.	19/05/2022	QC	QC meeting room	Day.	52.4 dB	-	
30.	19/05/2022	QC	QC Room	Day	58.7 dB	-	
31.	19/05/2022	QC	chemical store room	Day	48 dB	-	
32.	19/05/2022	QA	QA office	Day	54.6 dB	-	
33.	19/05/2022	QC	QC office	Day.	55.7 dB	-	
34.	19/05/2022	QC	HPLC Room	Day.	56.7 dB	-	
35.	19/05/2022	QC	Instrument Room	Day.	57.6 dB	-	
36.	19/05/2022		Labour colony	Day	53.6 dB	-	

Note :- Copy to OHC



## Annexure-42

### LED Lights



## Annexure-43

### Smoke Detectors



### Fire Extinguisher



## Fire Hydrant System



## Sprinkler System





**Annexure-44**

**Hazardous Waste Yard Impervious Floor**





**Annexure-45**

**Hazardous Waste Storage Yard Plinth Level**





**Annexure-46**

**Hazardous Waste Storage Yard Floor Slop**



**Hazardous Waste Storage Yard leakage Collection Pit**



**Annexure-47**

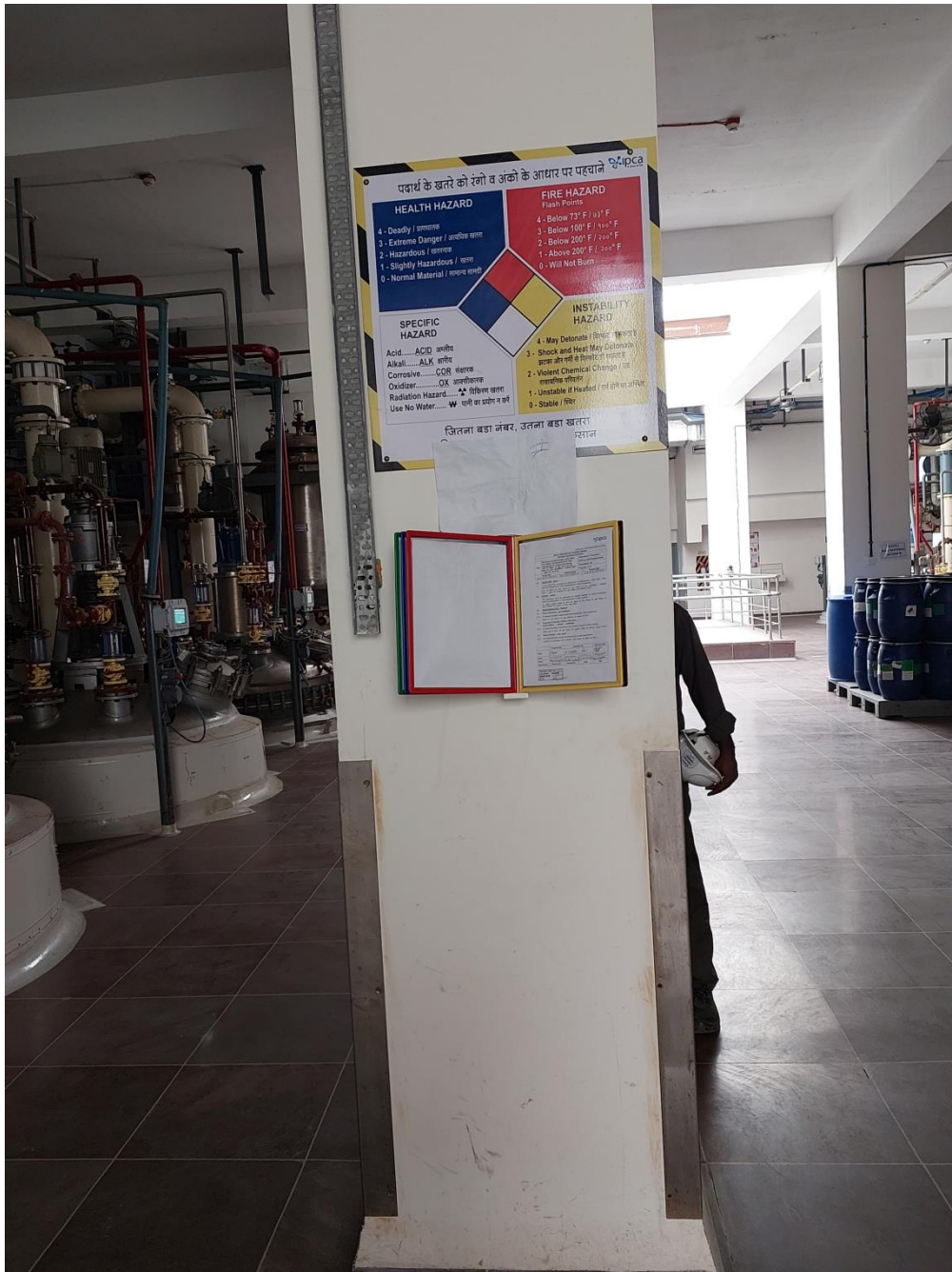
**Hazardous Waste Storage Spill Control Kit**





# Annexure-48

## MSDS Display



## Annexure-49

### Chemical Storage Tanks with Dyke Wall



## Annexure- 50

### Proposed Flow Diagram

**Product : Etodolac**

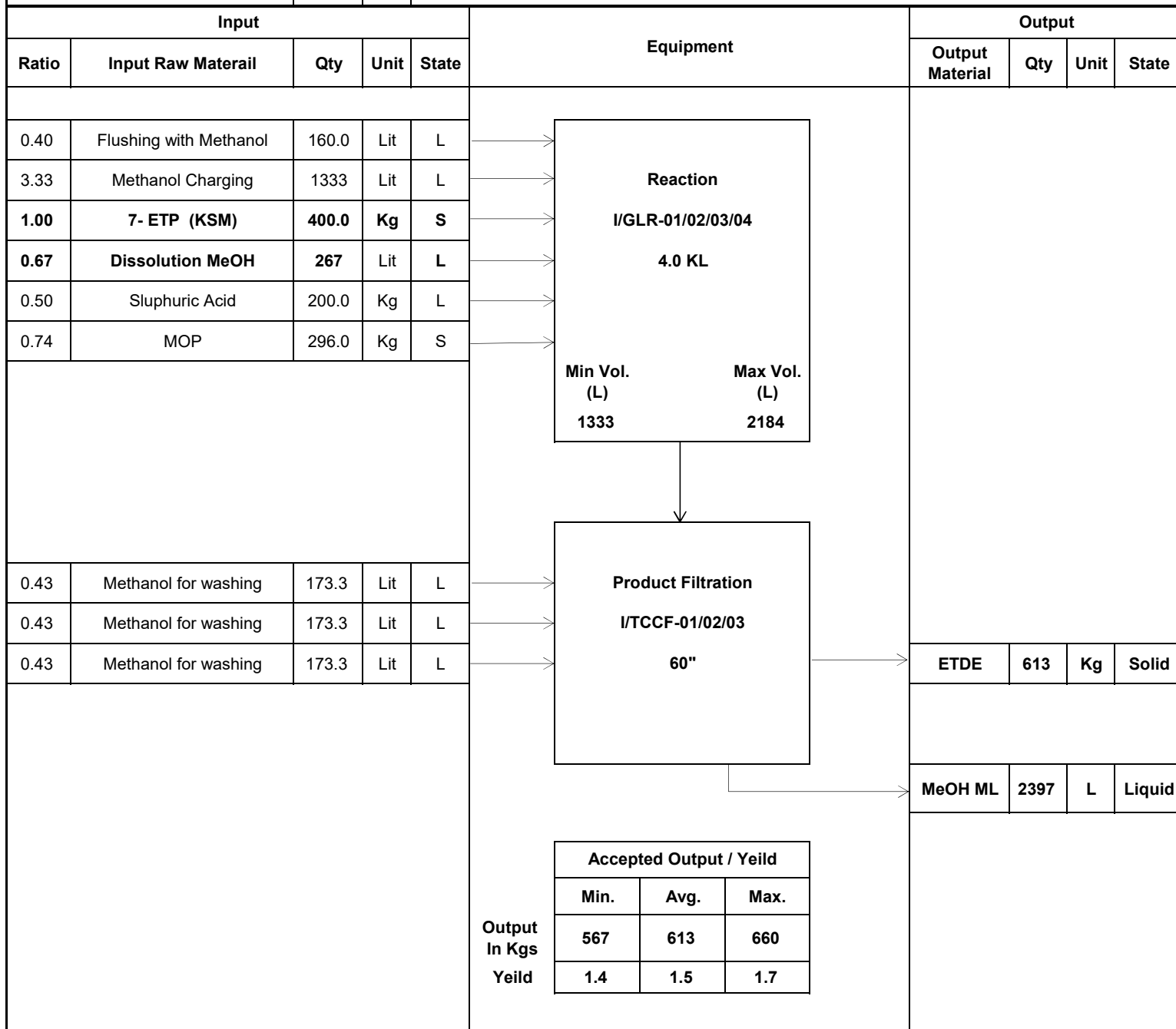
**Dewas - Block-I**

#### Stage-I Etodolac Methyl Ester (ETDE)

**Batch Size Input**

**400**

**Kg**





**Annexure-51**  
**Solvent Recovery Plant**



## Annexure-52

### Condensers for Vent



# **Annexure-53**

## **Hazardous Waste** **Handling SOP**



Ipca Laboratories Limited, Dewas			
Standard Operating Procedure			
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS	
		SOP No: SOP/EHS/2022/007/R00	
		Supersedes: Nil	
		Page No: 1 of 13	
Issue Date		Effective Date	
02/02/2022		10/02/2022	
		Review Date	
		09/02/2025	

1.0 **OBJECTIVE :**

- 1.1 To identify, collect, handle, store and dispose off Dangerous / Toxic Chemicals and Hazardous Waste emanating from API operations.
- 1.2 To minimize the risks of injury to the employees and protect environment.

2.0 **SCOPE :**

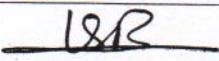
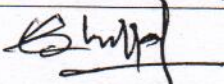
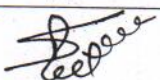
Procedure shall be applicable all chemical waste and biomedical waste.

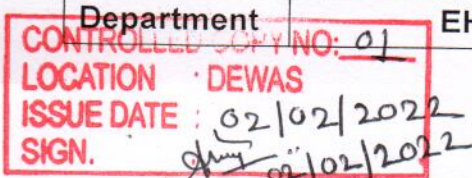
3.0 **RESPONSIBILITIES :**

It will be a joint responsibility of all concerned departments as explained through SOP itself.

4.0 **EHS PRECAUTIONS :**

- 4.1 Before entering in hazardous room switch on all exhaust fan & light while transferring / handling waste and use personal protective equipment like Rubber hand gloves, Multipurpose Nose Mask, Safety Goggle etc.
- 4.2 While transferring waste to ETP/MEE wear suitable PPEs depending upon type of waste handled.

	Prepared By	Checked By	Approved By
Sign			
Date	28/01/2022	29/01/2022	29/01/2022
Name	LAKHAN SINGH BANWARI	C.S. TEJANI	SUNIL RATHORE
Department	EHS	EHS	QA





Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 2 of 13
Issue Date		Effective Date
02/02/2022		10/02/2022
		Review Date
		09/02/2025

## 5.0 PROCEDURE :

### 5.1 Principal :

Number of Hazardous / Dangerous chemicals / Substances are generated during the manufacturing activities of API operations. Their identification, collection, handling, storage and disposal should be given special care in view of the inherent hazards associated with them. All such materials should be disposed off according to laid down safety procedure to avoid human injury and minimize soil, air or water pollution.

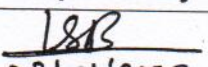
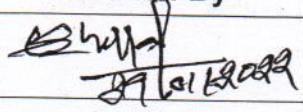

### 5.2 Types of Chemicals :

#### 5.2.1 Flammable Chemicals :

Substances or waste which has a flash point, lower than 93°C, these include flammable Solvents like Hexane, Acetone, Toluene, Methanol, Isopropyl alcohol, ethanol etc.

For storage, handling and disposal follow below precautions -

Sr. No.	Precaution for handling & storage
1.	Flammable materials should be stored in places, which are cool enough to prevent accidental ignition of the vapors mixture with air.
2.	The storage area should be situated away from any source of heat or fire hazard.
3.	Highly flammable substances should be kept apart from powerful oxidizing agents like chlorine or from materials which are susceptible to spontaneous combustion like oily rugs / jute / cotton etc.
4.	When highly volatile & flammable liquids are stored, any electrical light fitting or apparatus should be of certified flame proof construction.
5.	No open lights or flames (smoking, welding & cutting etc.) should be permitted in or near the storage space

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

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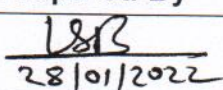
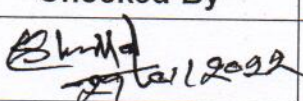
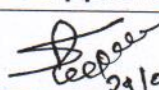
Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 3 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

Sr. No.	Precaution for handling & storage
6.	The storage room, tanks, installations should be electrically grounded and periodically inspected.
7.	They should be stored at a places having adequate ventilation, so that fugitive emissions of vapors from container will be diluted enough to prevent a spark from igniting them.
8.	Containers of flammable or combustible liquids should remain tightly sealed except when transferred, poured or applied. Remove only that portion of liquid in the storage container required to accomplish a particular job.
9.	Sufficient fire fighting equipments should be readily available near storage area.
10.	These type of chemical/ waste should not be handled in PVC drums
Sr. No.	Disposal
1.	Finally send for further disposal to Environment department for disposal through ETP / MEE accompanied with request for waste disposal format duly approved. (Format No. SOP/EHS/2022/007/F-01)

### 5.2.2 Toxic Chemicals:

Substances or waste if inhaled, ingested or penetrate the skin may involve delayed or chronic health effect. It includes Methylene Chloride, Epichlorohydrine, Ethylene Dichloride, Benzyl Chloride,  $POCl_3$ , Diethyl amine etc.

For storage, handling and disposal follow below precautions-

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Sign & Date	 28/01/2022	 27/01/2022	 29/01/2022
Department	EHS	EHS	QA

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NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 4 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

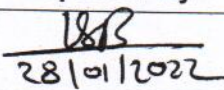
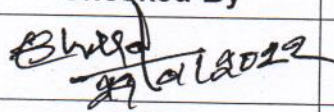
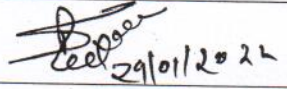
Sr. No.	Precaution for handling & storage
1.	Storage areas should be well ventilated.
2.	If the substances stored are likely to decompose due to contact with heat, moisture, acid etc. They should be stored in cool, well ventilated place out of direct sunrays, water, heat & ignition sources.
3.	Storing / eating food near the chemicals is not allowed.
4.	Persons should not be allowed to work alone in a storage area containing highly toxic substances.
Sr. No.	Disposal
1	Give treatment to waste as per the MSDS of the Chemical/ as specified by user department.
2	Finally send for disposal to Environment department through ETP/ MEE accompanied with a request for waste disposal format duly approved. (Format No. SOP/EHS/2022/007/F-01)

### 5.2.3 Corrosive Chemicals:

Substances or wastes, which by chemical action will cause severe damage when in contact with living tissue. These include strong acids, alkalies, Acetic Anhydride, Acetyl Chloride, Benzyl Chloride, Thionyl Chloride, etc.

For storage, handling and disposal follow below precautions-

Sr. No.	Precaution for handling & storage
1.	Such materials may cause damage to their containers and leak into atmosphere of the storage area resulting into corrosion to metal structures. Hence sound container, made of proper material should be used for storage purposes.

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

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NO.: 01



<b>Ipca Laboratories Limited, Dewas</b>		
<b>Standard Operating Procedure</b>		
<b>Title</b>	<b>Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste</b>	<b>Department : EHS</b>
		<b>SOP No: SOP/EHS/2022/007/R00</b>
		<b>Supersedes: Nil</b>
		<b>Page No: 5 of 13</b>
<b>Issue Date</b>	<b>Effective Date</b>	<b>Review Date</b>
<u>02/02/2022</u>	<u>10/02/2022</u>	<u>09/02/2025</u>

Sr. No.	Precaution for handling & storage
2.	The containers should be checked frequently for any leakage/damage.
3.	Any leaked / damaged containers should be immediately replaced.
4.	Such materials should be kept at cool places.
5.	Storage area for corrosive substances should be isolated from the rest of the plant.
6.	Storage area should be made of impervious wall and floor with provisions for the Safe disposal of spillage.
7.	Storage areas should be well ventilated.
8.	All metallic Structural work and parts in the area should be painted frequently or otherwise rendered immune to attack by Acid.
Sr. No.	Disposal
1.	Give treatment to waste as per the MSDS of the Chemical / as specified by user department.
2.	Finally send for disposal to Environment department accompanied with a request for waste disposal format duly approved. (Format No. SOP/EHS/2022/007/F-01)

**5.2.4 Water Reactive Chemicals : eg.  $\text{POCl}_3$** 
**For storage and handling follow below precautions-**

Sr. No.	Precaution for handling & storage
1.	Storage area should be well ventilated cool and dry.
2.	No water hydrant, water sprinkler, Water or foam type extinguisher, water type should be placed/ used in the area.

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Sign & Date	<u>LLB</u> 28/01/2022	<u>[Signature]</u> 29/01/2022	<u>[Signature]</u> 29/01/2022
Department	EHS	EHS	QA

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 NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 6 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

Sr. No.	Precaution for handling & storage
3.	Building should be water proof, located on high ground and separated from other storage.
4.	Design of windows should be such that it allows ventilation but rain water drops should not reach inside room.

### 5.2.5 Oxidizing Chemicals:

For storage and handling follow below precautions-

Sr. No.	Precaution for handling & storage
1.	Such materials are stored in a cool and well-ventilated area.
2.	Keep Away from the flammable chemical.
3.	The storage area should be non-metallic.

### 5.3 Hazardous Waste :

5.3.1 Hazardous waste means any waste which by reason of any of its physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristic causes danger or is likely to cause danger to health or environment whether alone or when in contact with other waste or substances. This category of waste is identified as per the latest Authorization obtained from M. P. Pollution Control Board.

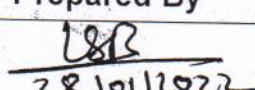
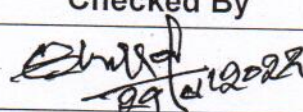
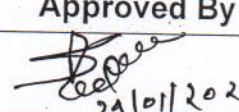
5.3.2 All such materials should be handled according to laid down safety procedure to avoid accidents and minimize health hazards.

5.3.3 Finally send for disposal to Environment department accompanied with a request for waste disposal format duly approved.

(Format No. SOP/EHS/2022/007/F-01)

### 5.3.4 API / Intermediates:

5.3.4.1 Powders are collected from the floors or from dust extraction systems are

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

CONTROLLED COPY  
NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 7 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

collected and sent for disposal through authorized 3rd party to Environment department accompanied with a request for waste disposal format duly approved. (Format No. SOP/EHS/2022/007/F-01)

5.3.4.2 Empty drums / bottles / bags / containers to be disposed off as per SOP No. SOP/EHS/2022/008/R00

5.3.4.3 Process waste from the plants is received through process drain pipelines in ETP / MEE Plant & is then processed in Recycling plants of Zero liquid discharge facility.

5.3.4.4 Process waste from the plant received in the drums are duly labeled, sorted / classified by plant in-charge and then disposed off as per mode of disposal mentioned in Authorization obtained.

### 5.3.5 Expired Chemicals :

5.3.5.1 All Expired chemicals (Solid/ Liquid) from all the Plants / PPA / BSR / OHC / QC / any lab or area are sent as it is to Environment dept. along with MSDS in separate closed leak proof container for further disposal of liquid chemicals in ETP / MEE and Solid chemicals at TSDF / Co-Processing in Cement kiln (Ultratech) Neemuch.

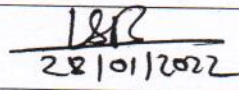
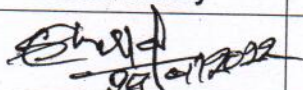
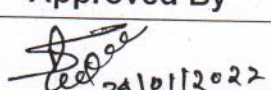
### 5.3.6 Warehouse / Stores:

5.3.6.1 Spilled materials are neutralized, collected and then sent for further disposal to Environment department for treatment at ETP / MEE accompanied with a request for waste disposal format duly approved.  
(Format No. SOP/EHS/2022/007/F-01)

5.3.6.2 Empty drums are decontaminated & sent to Scrap yard as per SOP No. SOP/EHS/2022/008/R00

### 5.3.7 Operations of QC / PCE / CMS labs:

5.3.7.1 **Tested Solid Samples / Waste :** All tested solid samples to be collected separately as such in separate poly bags with NFPA Label & name of chemical in closed container and sent for disposal to environment department for disposal to authorized 3<sup>rd</sup> party accompanied with a request for waste disposal form duly approved. (Format No. SOP/EHS/2022/007/F-01).

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 28/01/2022	 28/01/2022
Department	EHS	EHS	QA

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NO.: 01



Ipca Laboratories Limited, Dewas			
Standard Operating Procedure			
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS	
		SOP No: SOP/EHS/2022/007/R00	
		Supersedes: Nil	
		Page No: 8 of 13	
Issue Date		Effective Date	
02 / 02 / 2022		10 / 02 / 2022	
Review Date			
09 / 02 / 2025			

5.3.7.2 **All Liquid Samples / Waste** : All liquid samples / waste to be collected separately as HPLC Waste, GC, KF, Organic Acid, Inorganic Acid, Solvents, etc. In separate closed, leak proof containers with hazard label and name with MSDS to be sent for further disposal through ETP / MEE to Environment department for disposal accompanied with a request for waste disposal format duly approved. (Format No. SOP/EHS/2022/007/F-01).

**5.3.8 Engineering and Utilities:**

5.3.8.1 Lubricating oils / greases, food or non food grade are to be sent to Environment department for sell to registered recycler.

5.3.8.2 Batteries are returned to the original battery manufacturers on replacement basis as per Batteries (Management & Handling) Rules.

**5.4 Biomedical Waste :**

5.4.1 **Occupational Health Center** : All the biomedical waste is to be identified and to be sent to authorized party for incineration as per Format No. SOP/EHS/2022/007/F-02.

5.4.2 **Microbiological Laboratory** : Microbiological waste is to be sent to authorized party for incineration.

**5.5 Canteen Waste :**

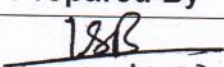
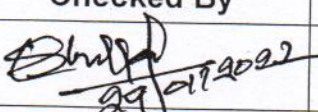
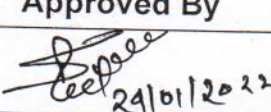
Canteen waste is collected, segregated and then processed in waste composting machine to convert the waste into manure. Manure is used in the green belt inside the premises or sold to Municipal Corporation as per Register given by Municipal Corporation.

**5.6 General Precautions :**

**5.6.1 Handling of Dangerous Substances :**

5.6.1.1 The containers or dangerous substances should be used on first come first out basis.

5.6.1.2 Dangerous substances should be loaded, unloaded, handled and stored under the supervisor, who is familiar with risks and precautions to be taken. He must inform the workers about the associated hazards.

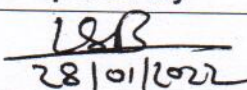
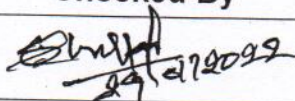
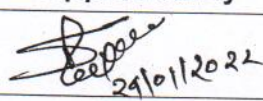
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Department	EHS	EHS	QA

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NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 9 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

- 5.6.1.3 Dangerous substance should be checked for the compliance of labeling procedure.
- 5.6.1.4 Special care should be taken to prevent breakage of or damage to containers of dangerous substances.
- 5.6.1.5 Empty containers of dangerous substances should be discarded only after they are thoroughly decontaminated.
- 5.6.1.6 Incompatible chemicals should be stored separately.
- 5.6.1.7 These substances should be kept in their original containers.
- 5.6.1.8 Unauthorized entry at loading, unloading & storage area should be made restricted.
- 5.6.1.9 Eating, drinking and smoking in storage area should be made strictly prohibited.
- 5.6.1.10 Materials received in drums, boxes, carboys etc. should be transported on pallets using hand trolleys, forklift trunks etc.
- 5.6.2 Handling of Carboys Containing Dangerous Substances :**
- 5.6.2.1 Carboys should not be carried above shoulders, in any case never above waist level as breakage or splashing of the containers may produce extremely dangerous results.
- 5.6.2.2 They should not be rolled on their bottom edge, and should only transported in upright position.
- 5.6.2.3 They should be transported with minimum bumping.
- 5.6.2.4 When contained in wooden or other carrier, it should be ensured before handling that the carrier is in sound condition.
- 5.6.2.5 They should preferably transferred in wheeled trolleys.
- 5.6.2.6 Mechanical carboys pumps should be used for removal of the contents.
- 5.6.2.7 Face / eye protection should be used while opening carboys.
- 5.6.2.8 Face should be kept away to protect from splashing.

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

CONTROLLED COPY  
 NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 10 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

5.6.2.9 Carboys of one Chemical should not be used for another chemical unless thoroughly decontaminated and cleaned.

5.6.2.10 Empty & filled carboys should be stored separately in well ventilated area.

5.6.2.11 Carboys should not be stored in more than 2 layers.

### 5.6.3 Handling of Drums Containing Dangerous Substances :

5.6.3.1 As far as possible, drums should be handled in the upright position.

5.6.3.2 Where drums have to place on their sides, suitable cushioning material should be placed under to prevent rolling / damage.

5.6.3.3 Drums filled with liquids should be left 5% space free for air displacement.

5.6.3.4 While opening drum bungs, slowly loose it by quarter turn to release pressure and then open it completely. While doing so, face should be kept away.

5.6.3.5 Air vent bung (small) should be kept open while filling / emptying the drum.

5.6.3.6 Contents of drums should be removed by a barrel pump, Siphon pump or vacuum with earthing by heavy duty clamp.

5.6.3.7 Drums should not be rolled whereas they should be transported in hand trolleys.

5.6.3.8 Drums should preferably store slightly above the ground for proper drainage and washing of spills.

5.6.3.9 Drums of solids should be emptied out by scoop and never by hands.

5.6.3.10 For using others purposes drums should be thoroughly decontaminated and cleaned. Original labels shall be defaced.

5.6.3.11 Drums should not be stored near steam pipes, boilers or other source of heat.

5.6.3.12 For loading / unloading of drums in truck, tempo etc. suitable platform & ramp should be provided. They should not be dropped.

### 5.6.4 Handling of Bags Containing Dangerous Substances :

5.6.4.1 Bags containing dangerous substances should not be hooked.

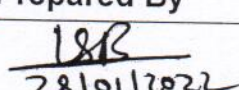
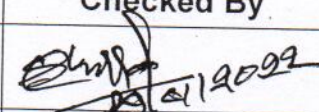
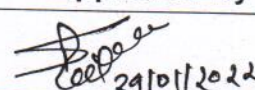
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Department	EHS	EHS	QA

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Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 11 of 13
Issue Date	Effective Date	Review Date
02/02/2022	10/02/2022	09/02/2025

- 5.6.4.2 Bags should not be dropped from any height as they may break open and contents may come out.
- 5.6.4.3 Bags should be protected from Water.
- 5.6.4.4 Bags should be cross stacked for stability.
- 5.6.4.5 Empty bags should be disposed of with due care.
- 5.6.5 Handling of Glass Bottles Containing Dangerous Substances:**
- 5.6.5.1 Bottles should be always kept closed.
- 5.6.5.2 They should not be held by their neck.
- 5.6.5.3 They should be carried in baskets / bottle holders.
- 5.6.5.4 While loosening cap, face should be kept away use eye / face protection.
- 5.6.6 Handling of Damaged Containers:**
- 5.6.6.1 When any container is damaged or suspected of having damage, workers should be cleared from the area.
- 5.6.6.2 Thoroughly inspection should be made by a responsible person to locate the damaged container.
- 5.6.6.3 The damaged container should be segregated and person employed for the job should wear necessary Personal protective Equipment's.
- 5.6.6.4 The leaked spilled material should be decontaminated and cleared off by using spill control kit.
- 5.7 General Procedures for Collection, Transfer, Recording and Disposal :**
- 5.7.1 Person involved in collection and transfer of dangerous / hazardous waste shall wear necessary PPE's as the waste may be toxic or corrosive in nature.
- 5.7.2 All such waste should be packed in sealed and leak proof container.
- 5.7.3 Transfer of waste from various plants/areas to Hazardous room of environment department shall be done between 10:00 Hrs. to 16.30 Hrs. only. No waste shall be received on Sunday and company holidays.

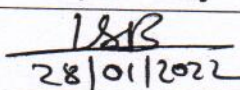
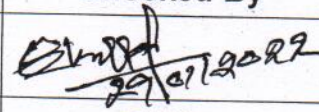
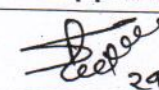
	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

CONTROLLED COPY  
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Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 12 of 13
Issue Date	Effective Date	Review Date
02 / 02 / 2022	10/02/2022	09/02/2025

- 5.7.4 All the waste generated in the other shift shall be stored at the designated areas within department.
- 5.7.5 Contaminated water coming out from the washing of waste shall be disposed of to ETP through process drainage or drums.
- 5.7.6 Waste in suitable leak proof containers shall be transferred to Hazardous waste Storage Shed in tractor trolley or forklift truck or pallet trolley or pilot vehicle.
- 5.7.7 While transferring waste to Hazardous Waste Storage Shed care shall be taken that there is no spillage of Chemical or waste.
- 5.7.8 In case of spillage same shall be collected and disposed off to Hazardous Waste Storage Shed. If required the affected area shall be cleaned with cleaning agent / spill control kit and shall be sent to ETP or Hazardous waste room.
- 5.7.9 Any waste should not be transferred without any prior intimation to environment department.
- 5.7.10 Plant In-charge inform the environment department in writing in Format No. SOP/EHS/2022/007/F-01, about the waste generated in his area of control and advise him to receive the same. Records of waste receipt shall be maintained by Environment Department.
- 5.7.11 The waste containers should be stored in the scrap yard.
- 5.7.12 The Waste Containers should be labeled.
- 5.7.13 All wastes should be stored in Hazardous waste shed & disposal as per the mode of disposal mentioned in latest Authorization obtained for MPPCB.
- 5.7.14 Correct NFPA / hazard label on bottles / container / bag containing waste to be ensured by all plant in charges.

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
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NO.: 01



Ipca Laboratories Limited, Dewas		
Standard Operating Procedure		
Title	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 13 of 13
Issue Date		Effective Date
02 / 02 / 2022		10 / 02 / 2022
Review Date		
09 / 02 / 2025		

**6.0 ANNEXURE(S) / FORMAT(S) :**

Annexure No.	Format No.	Title
Annexure-I	SOP/EHS/2022/007/F-01-R00	Hazardous Waste Disposal Slip
Annexure-II	SOP/EHS/2022/007/F-02-R00	Record of Biomedical Waste Sent to Incinerator

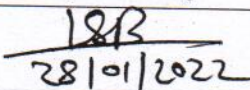
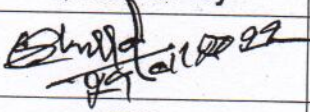
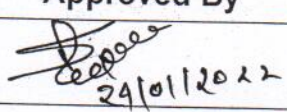
**7.0 ABBREVIATIONS :**

- EHS : Environment health & safety  
 SOP : Standard Operating Procedure  
 PPE : Personnel protective equipment  
 QA : Quality Assurance  
 QC : Quality Control  
 BSR : Bonded Storage Room  
 OHC : Occupational Health Center  
 PCEL : Process Chemistry Excellence Lab

**8.0 REFERENCE (S) :**

Nil

-----X-----

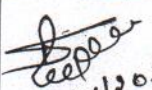
	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

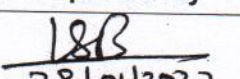
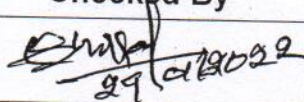
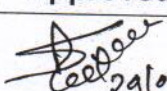
CONTROLLED COPY  
 NO.: 01



<b>Ipca Laboratories Limited, Dewas</b>		
<b>Standard Operating Procedure</b>		
<b>Title</b>	Management and Handling of Chemical and Disposal of Hazardous, Biomedical and Canteen Waste	Department : EHS
		SOP No: SOP/EHS/2022/007/R00
		Supersedes: Nil
		Page No: 1 of 1
<b>Issue Date</b>	<b>Effective Date</b>	<b>Review Date</b>
02/02/2022	10/02/2022	09/02/2025

## REVISION CARD

Revision Date	Revision No.	Details of Revision	Reason for Revision	Approved By
21/01/2022	00	New SOP Prepared	New Issue	 29/01/2022

	Prepared By	Checked By	Approved By
Sign & Date	 28/01/2022	 29/01/2022	 29/01/2022
Department	EHS	EHS	QA

CONTROLLED COPY  
 NO.: 01



**MASTER COPY**

Format No. : SOP/EHS/2022/007/F-01-R00

**Hazardous Waste Disposal Slip**

Please receive following waste for necessary disposal since this does not have any recoverable material and can be disposed off at your end

<b>To:</b> Environment Department	<b>From Plant No./ Area:</b> _____ <b>Name of Incharge:</b> _____	<b>Date:</b> _____
---	--	--------------------

Name of Waste :	
Name of Concerned Product :	
Stage of Generation :	
Batch No. :	
State of Waste (Solid / Liquid / Others Please mention) :	
Quantity of Waste Being Transferred (with unit) :	
Types of container - MS / PVC / etc. Drum / Any other (Please write) :	
No. of Packs (Bag / Drum) :	
Specific Precautions for Disposal (if any) :	

**Sent By (Sign & Date):**  
Plant / Area Incharge / Chemist

**Received By (Sign & Date):**  
Environment Incharge / Chemist / Technician

**CONTROLLED COPY**  
NO.: 01





Annexure-54

Personal Protective Equipment's





## Annexure-55

### Training Photographs





## Annexure-56

### Facility Provided to Civil Worker During construction Phase



## Annexure-57

### Occupational Health Centre



#### OHC Beds



#### OHC Desk





## Annexure-58

### Parking





## Annexure-59

### EHS Policy at Site





**Annexure-60**

**Board Resolution**



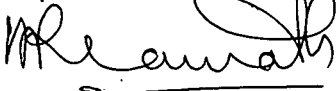
**CERTIFIED TRUE COPY OF THE CIRCULAR RESOLUTION 98 DATED 22<sup>ND</sup> DECEMBER, 2022 PASSED BY THE BOARD OF DIRECTORS OF THE COMPANY**

**CONSENT OF THE COMPANY FOR COMMITMENT AND APPROVAL FOR SPENDING TOWARDS CORPORATE ENVIRONMENT RESPONSIBILITY (CER) AGAINST ENVIRONMENT CONSENT (EC) FOR NEW PROJECT AT DEWAS**

“RESOLVED THAT the consent and Commitment of the Company be and is hereby accorded for allocation of an amount of Rs. 4.87 crores, in five years, towards Corporate Environment Responsibility (CER) and other activities to be done under the guidance of the CER Committee of District and State against Environment Consent (EC) for Company's proposed new project vide letter no 1095/SEIAA/20 dated 18.06.2022 for manufacturing of APIs and intermediates at Dewas (Madhya Pradesh).

RESOLVED FURTHER that Mr. Premchand Godha, Chairman & Managing Director or Mr. A K Jain, Joint Managing Director or Mr. Chandrasen Hillal , Sr. General Manager – Operations be and are hereby severally authorised to sign all the documents for on behalf of the Company and to do all such other acts, things and deeds as may be necessary to give effect to this resolution.”

Certified True Copy  
For Ipca Laboratories Limited

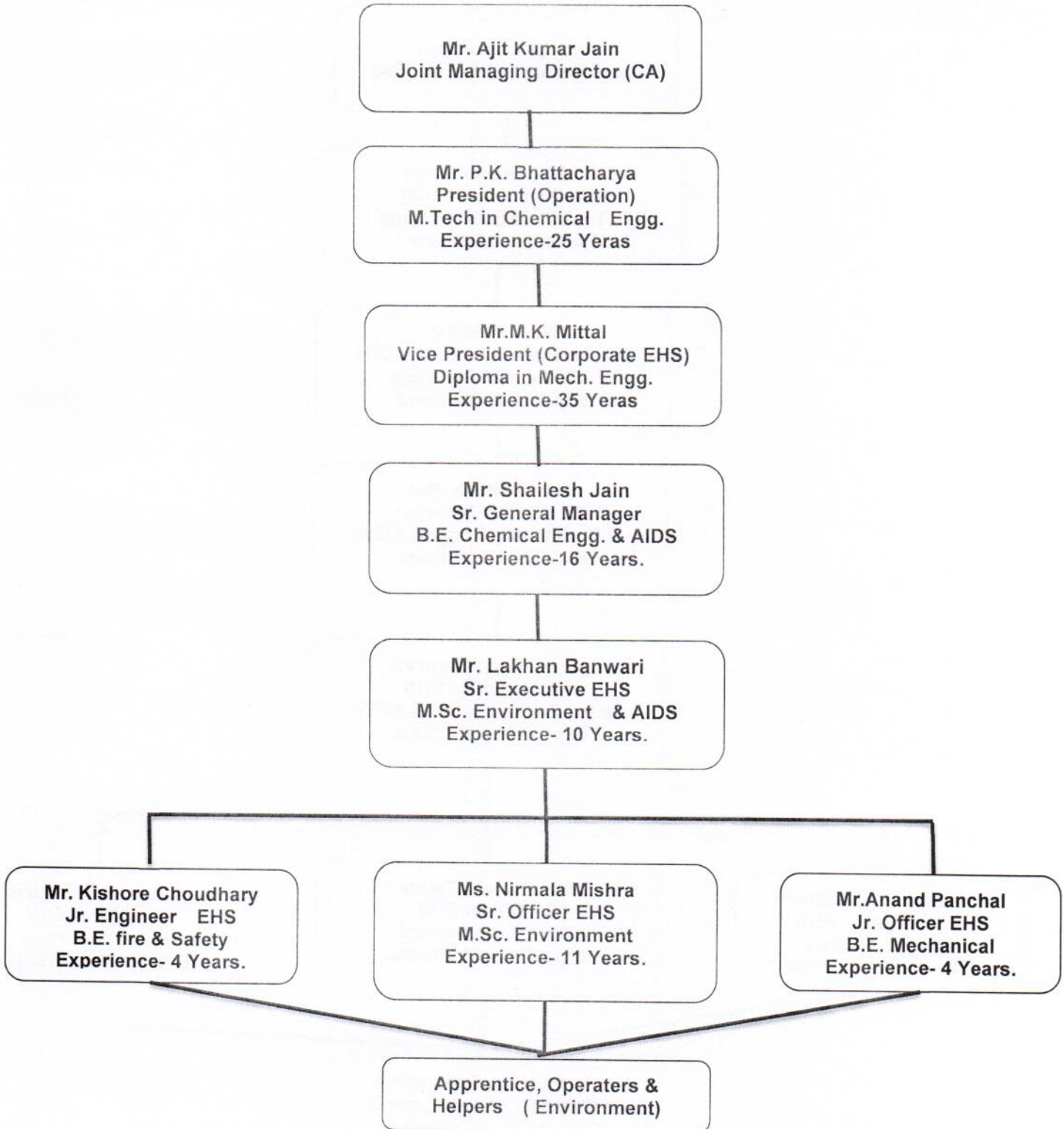


Harish P. Kamath  
Company Secretary  
ACS No. 6792  
Address: 125, Kandivli Industrial Estate  
Kandivli (West), Mumbai – 400 067

**Ipca Laboratories Ltd.**  
**www.ipca.com**

Annexure-61  
Ipca Laboratories Limited, Dewas

**ORGANOGRAM (ENVIRONMET CELL)**

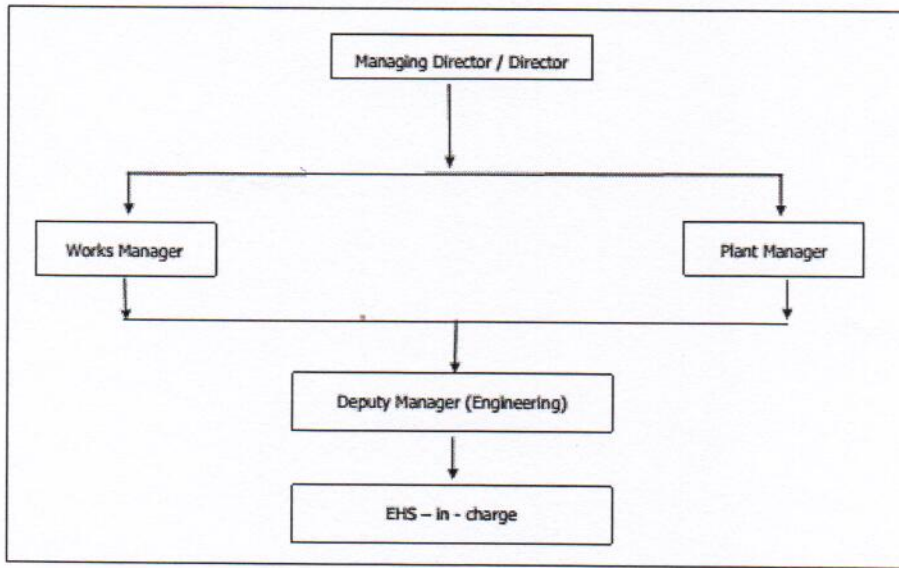


# **Annexure-62**

**EMP**



**Figure 10-3: Hierarchy of Environment Management Cell**



**1.4 Expenditure on Environmental Matters**

The expenditure to be incurred by M/s. Ipca Laboratories Ltd. on environmental matters is given in **Table 10-15**.

**Table 10-15: Expenditure on Environmental Matters**

S. No	Head	Approximate Capital cost (In Crore)	Approximate recurring cost per annum (In Crore)	Basis for Cost Estimates
1	Air Pollution Control	4	1	Capital Cost (Part of Process Plant per annum)
				Cost of providing adequate stack height to flue gas stacks, Cost of installation of APCD, 2 Cr. Of bag filter + Stack height, 1 Cr. Of Scrubbers, 1 Cr. Of DG Set Stack.
				Recurring Cost (per annum)
				Cost of installation of APCD, 1 Cr. Maintenance, manpower, AMC, Calibration, replacement, Monitoring, Cost of Stack Monitoring.
2	Water Pollution Control	15.5	6.2	Capital Cost (per annum)
				ETP (500 KLD) – 600 Recycling RO (400 KLD) – 400 MEE (150 KLD) – 400 STP (50 KLD) – 50 OWC Converter for Canteen Waste – 50 Rain Water Harvesting System - 50
				Recurring Cost (per annum)
				ETP – Rs 45/KL – 70 Recycling RO – Rs 75/KL – 109 MEE – Rs 800/KL – 438 STP – Rs 10/KL – 1.5
3	Noise Pollution	0.2	0.01	Capital Cost (per annum)
				Cost of acoustic enclosure, padding etc.



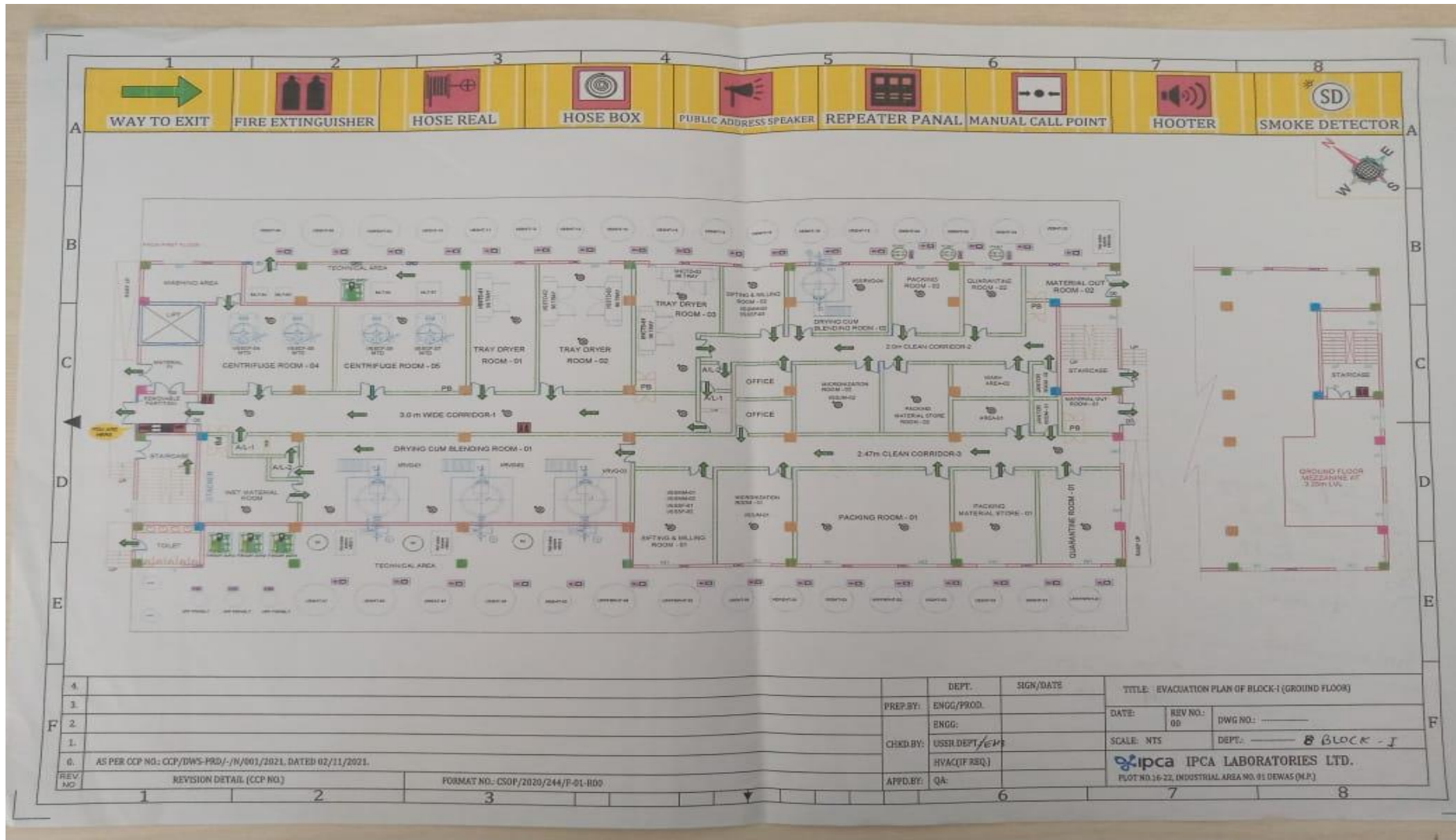
S. No	Head	Approximate Capital cost (In Crore)	Approximate recurring cost per annum (In Crore)	Basis for Cost Estimates
	Monitoring			Recurring Cost (per annum) Monitoring Cost
4	Solid and Hazardous Waste Management	0.75	1.4	Capital Cost (per annum) Construction of Solid and Hazardous Waste Storage Areas – 75 Lacs. Recurring Cost (per annum) ETP sludge with MEE Salt disposal Costs – 2802 x 5 = 140 Lacs.
5	Environment Monitoring And Management	1.0	0.1	Capital Cost (per annum) ETP Monitoring Cost with Laboratory Set up – 100 Lacs Recurring Cost (per annum) Monitoring of Effluent samples, Raw water and Surface water samples as per requirement
6	Greenbelt	0.12	0.0005	Capital Cost (per annum) Greenbelt within Project Site Recurring Cost: (per annum) considering 20% mortality rate
<b>Total</b>		<b>21.57</b>	<b>8.7105</b>	





# Annexure-63

## EREP





**Annexure-64**

**Factory Licence**

**Ipca Dewas**



**LICENCE TO WORK A FACTORY**  
**(Form No.3 prescribed under Rule 5 of M.P Factories Rules, 1962)**

Nic Number : 21002

Fee(in Rs) : 266439

Licence No : 171/17160/DWS/2m(i)/H

Challan No : 11/21/07341

(Mention this number invariably in  
all correspondences with this office)

Date : 29/11/2021

Treasury : SBI,E-Payment

Factory Id : FAC2122640

Licence is hereby granted to Mr./Mrs. : **AJIT KUMAR JAIN**

Occupier of : **Ipca Laboratories Ltd.**

Located at : **16A, 16B,17A, 17B,18A,18B, 19A, 19B, 20A,  
20B, 20C, 21A, 21B, 21C and 22, Industrial  
Area No 1**

District : **Dewas**

(Subject to the provisions of the Factories Act, 1948 and the rules made there under and the conditions annexed here with) Valid only for the premises at the above location(as per the plan approved under the Factories Act and Rules) for use as a factory employing **not more than 500 ( Five hundred )** workers on any one day during the year and having installed motive power **not Exceeding 4000 ( Four thousand )** Horse Power, where the manufacture process of **Manufacturing of Basic Drugs** will be carried by him.

This licence shall remain in force till the 31st day of December, 2023(2022-2023)

Indore

Dated : 14/01/2022

Digitally Signed By SHRISH GOPALRAO  
WADIKAR (Personal)

Chief Inspector of Factories  
Madhya Pradesh

वैधानिक सूचना: यह प्रमाण-पत्र बगैर निरीक्षण अथवा सत्यापन के केवल आवेदक द्वारा दी गयी जानकारी के आधार पर जारी किया गया है अतः असत्य जानकारी पाये जाने पर आवेदक स्वयं उत्तरदायी होगा।

This is a digitally signed online verifiable document and does not need manual signature.  
This certificate is accepted across all the departments and can be validated online on [www.labour.mp.gov.in](http://www.labour.mp.gov.in).

## Annexure-65

### Advertisement in Local newspaper

**PUBLIC NOTICE**

**Prior Environment Clearance for Proposed API & Intermediate Plant**

We, M/s. Iqra Laboratories Ltd. hereby bring into the notice of general public that the M.P. State Environment Impact Assessment Authority (SEIAA), M.P. (Government of India Ministry of Environment and Forests) has granted Environment Clearance for our proposed plant for manufacturing of Pharmaceutical products (API & its intermediates) at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No.1, Dist. Dewas, Madhya Pradesh - 455001 vide order no. 1095/SEIAA/20 dated 18/06/2020. The copy of the environmental clearance letter is available with M.P. Pollution Control Board and may also be seen on website of SEIAA at <http://mpseiaa.nic.in>

M/s Iqra Laboratories Ltd.,  
Industrial Area No.1,  
Dist - Dewas (M.P.)  
Pin - 455001

**सार्वजनिक सूचना**

**प्रस्तावित एपीआई एवं इंटरमिडिएट प्लांट के लिए पर्यावरण स्वीकृति**

हम, इफ्का लेबोरेट्रीज लिमिटेड सर्वसाधारण जनता को सूचित करना चाहते हैं कि हमारी प्रस्तावित इंकाई प्लांट नम्बर 19-ए, 19-बी, 20-ए, 20-बी, 21-ए, 21-बी एवं 22 औद्योगिक क्षेत्र क्र.-1, जिला-देवास (म.प्र.) के फार्मास्यूटिकल प्रोडक्ट्स एवं उसके इंटरमिडिएट प्रोडक्ट्स के उत्पादन प्लांट को म.प्र. राज्य पर्यावरण प्रभाव आँकलन प्राधिकरण (SEIAA) म.प्र. पर्यावरण एवं वन मंत्रालय, भारत सरकार के पत्र क्रमांक 1095/ SEIAA/20 दिनांक 18.06.2020 द्वारा पूर्व स्वीकृति दी गई है। जिसकी प्रति मध्य प्रदेश प्रदूषण नियंत्रण बोर्ड एवं राज्य पर्यावरण प्रभाव आँकलन (SEIAA) म.प्र. की वेबसाइट [www.mpseiaa.nic.in](http://www.mpseiaa.nic.in) पर उपलब्ध है।

मेसर्स, इफ्का लेबोरेट्रीज लिमिटेड  
औद्योगिक क्षेत्र क्रमांक-1  
जिला देवास  
पिन-455001



# Annexure-66

## EC Compliance Report Uploaded on Parivesh Portal

PARIVESH  
परिवेश  
"Pro Active and Responsive facilitation by Interactive, Virtuous and Environmental Single Window Hub"

State Environment Impact Assessment Authority  
UserID: [manojkumar.mittal@ipca.com]  
Logout

Home Environment Clearance Only CRZ Clearance Forest Clearance Wildlife Reference

Please do not enter any special character like < > : " / \ | ? \* etc. in the form fields

**Form for Uploading Compliance Report**

Proposal No : SIA/MP/IND2/151744/2020  
Proposal Name : Proposed Project at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas,  
Category : Industrial Projects - 2  
MoEF File No. : 6537/2019

Compliance Letter/Report

Year of Compliance : -All Years-  
Date of Compliance : Select

Remarks :  
Upload Compliance Letter/Report : Choose File No file chosen (pdf only)

SUBMIT

PARIVESH  
परिवेश  
"Pro Active and Responsive facilitation by Interactive, Virtuous and Environmental Single Window Hub"

State Environment Impact Assessment Authority  
UserID: [manojkumar.mittal@ipca.com]  
Logout

**Form for Uploading Compliance Report**

Proposal No : SIA/MP/IND2/151744/2020  
Proposal Name : Proposed Project at Plot No. 19-A, 19-B, 20-A, 20-B, 21-A, 21-B & 22 Industrial Area No. 1, Dist. Dewas,  
Category : Industrial Projects - 2  
MoEF File No. : 6537/2019

Compliance Letter/Report

Year of Compliance : -All Years-  
Date of Compliance : Select

Remarks :  
Upload Compliance Letter/Report : Choose File No file chosen (pdf only)

SUBMIT

Sno.	Proposal No.	Uploaded copy of Compliance report	Remarks	Uploaded Date	Delete
1	SIA/MP/IND2/151744/2020	1222202246814764ECconditioncomplianceReportfromDec-21toMay-22.pdf		22/12/2022	

## EC Compliance Report Uploaded on XGN Portal of MPPCB



Ref. No. - IPCA/EHS/2022/  
Date: 03/06/2022

To,  
**The Regional Officer,**  
M.P. Pollution Control Board,  
186, Ganga Nagar  
Dewas (M. P.)

**Sub** : Six Monthly Compliance Report of EC Conditions.

**Ref.** : S. No. 1045/SEIAA/2020 dated 28.06.2020


Dear Sir,

With reference to the above subject, we are submitting herewith Six monthly compliance reports (Jan'2022 to June '2022) for your kind consideration.

We hope that all the document / information as submitted shall be in order.

Thanking you and with regards,

Yours faithfully  
For Ipca Laboratories Ltd.

  
**(Chandrasen Hillal)**  
**Unit Head**

Encl As above  
CC : Member Secretary (SEIAA-Bhopal)  
CC : Member Secretary (MPPCB-Bhopal)  
CC : Joint Director (MOEF-Bhopal)



Ipca Laboratories Ltd.  
[www.ipca.com](http://www.ipca.com)

Plot 16-22, Industrial Area No 1, AS Road, Dewas-455 001 (Madhya Pradesh), India | T: +91 93032 78184

Regd. Office: 49, Kandivla Industrial Estate, Kandivla (West), Mumbai-400 057 (Maharashtra), India | T: +91 22 6647 4444

A. Any Specific Information (as required): Uploaded to XGN on 28/06/2022 11:05:34 from IP No: 14.141.163.22

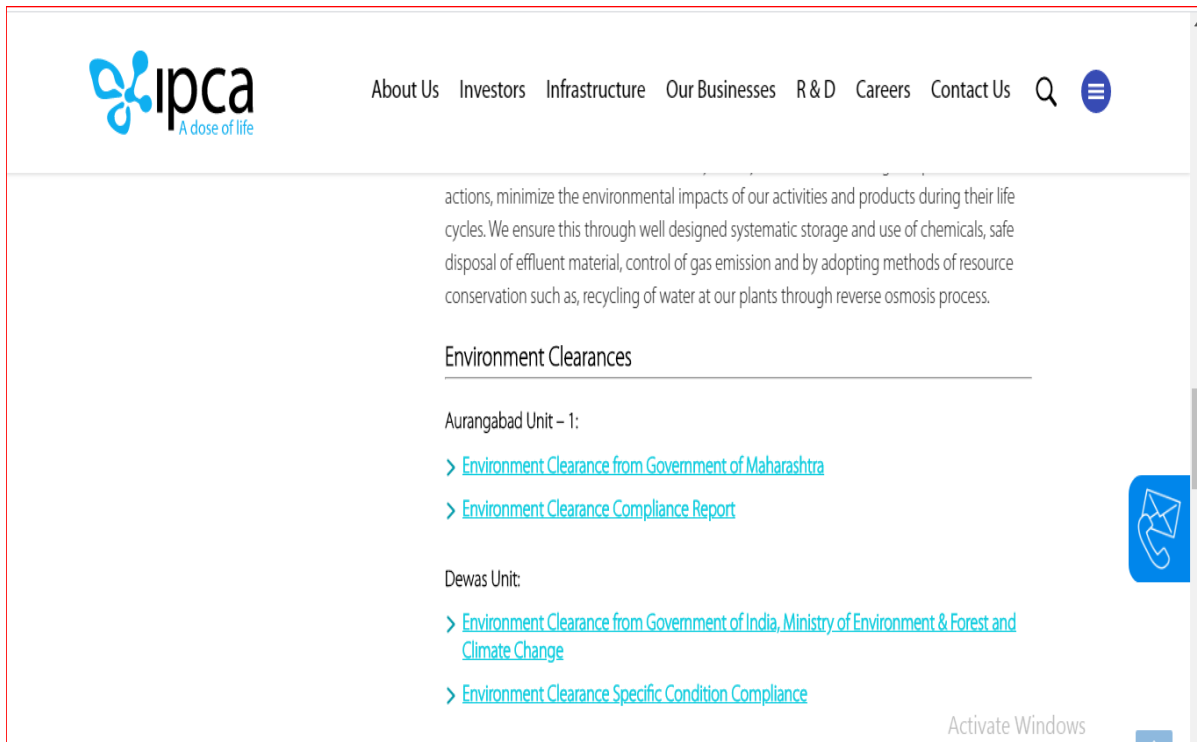
B. I, 128386-Ipca Laboratories Limited, accepts the LEGAL responsibility

and undertakes that the furnished information is CORRECT & ACCURATE.

E: [ipca@ipca.com](mailto:ipca@ipca.com) | CN: L242399W-01949PLC007837

## Annexure-67

### EC Compliance Report Uoploaded on Company Website



The screenshot displays the IPCA website's navigation menu and a section titled "Environment Clearances". The navigation menu includes "About Us", "Investors", "Infrastructure", "Our Businesses", "R & D", "Careers", and "Contact Us", along with search and menu icons. The "Environment Clearances" section lists links for "Aurangabad Unit - 1" and "Dewas Unit".

actions, minimize the environmental impacts of our activities and products during their life cycles. We ensure this through well designed systematic storage and use of chemicals, safe disposal of effluent material, control of gas emission and by adopting methods of resource conservation such as, recycling of water at our plants through reverse osmosis process.

#### Environment Clearances

Aurangabad Unit – 1:

- > [Environment Clearance from Government of Maharashtra](#)
- > [Environment Clearance Compliance Report](#)

Dewas Unit:

- > [Environment Clearance from Government of India, Ministry of Environment & Forest and Climate Change](#)
- > [Environment Clearance Specific Condition Compliance](#)

Activate Windows



## Annexure-68

### Form-V Uploaded on XGN

PCBID : 128304			Ipca Laboratories Limited (Red-Large)			
For Online Application Submission						
MPPCB - Google Chrome						
xgn.mp.nic.in/csharp/annualreports/annualreports.aspx						
			17:11:05	Report- Boiler		
16	Periodical Compliance	2022-2023	06/10/2022 17:10:04	Quarterly Environment Monitoring Report-DG	<a href="#">Comments</a>	<a href="#">View</a>
17	Periodical Compliance	2022-2023	06/10/2022 15:34:31	Quarterly Environmental Monitoring Reports-STP Outlet	<a href="#">Comments</a>	<a href="#">View</a>
18	Periodical Compliance	2022-2023	06/10/2022 15:33:16	Quarterly Environmental Monitoring Reports-Scrubber	<a href="#">Comments</a>	<a href="#">View</a>
19	Periodical Compliance	2022-2023	06/10/2022 15:32:36	Quarterly Environmental Monitoring Reports-Boiler & DG	<a href="#">Comments</a>	<a href="#">View</a>
20	Periodical Compliance	2022-2023	06/10/2022 15:31:31	Environmental Monitoring Reports-Ambient	<a href="#">Comments</a>	<a href="#">View</a>
21	Periodical Compliance	2022-2023	06/10/2022 15:29:32	Environmental Monitoring Reports	<a href="#">Comments</a>	<a href="#">View</a>
22	Environment Statement (Form-V)	2020-2021	21/09/2022 13:03:52	Form-V for the financial year 2021-22	<a href="#">Comments</a>	<a href="#">View</a>

Activate Windows  
Go to Settings to activate Windows.

## Annexure-69

### List of Employees Examined During Jun' 22 to Nov'22

Sr. No.	Location	Employee Name
1	Dewas	Mr. DINESH PURI GOSWAMI
2	Dewas	Mr. SHUBHAM ZINIWAL
3	Dewas	Mr. SUNIL KUMAR NAGAR
4	Dewas	Mr. RAM MILAN YADAV
5	Dewas	Mr. MADHURAJ SINGH
6	Dewas	Mr. ARJUN BAREDA
7	Dewas	Mr. GOVIND YADAV
8	Dewas	Mr. ROSHAN GAJANAN BURDE
9	Dewas	Mr. RANCHHOD DHANGAR
10	Dewas	Mr. VIVEK SINGH
11	Dewas	Mr. ANKIT VERMA
12	Dewas	Mr. KAPIL SONWANE
13	Dewas	Mr. SHIVPAL PARTE
14	Dewas	Mr. JANARTHANAN K.
15	Dewas	Mr. DILIP GAMI
16	Dewas	Mr. DEEPAK KUMAR MEHRA
17	Dewas	Mr. ASHISH SHARMA
18	Dewas	Mr. OM PRAKASH SEJU
19	Dewas	Mr. SONU YADAV
20	Dewas	Mr. DEEPAK MUKATI
21	Dewas	Mr. TARUN CHOUDHARY
22	Dewas	Mr. AMIT RAGHUWANSHI
23	Dewas	Mr. SUDHANSHU SAHU
24	Dewas	Mr. GURUBAKSH LOHANA
25	Dewas	Mr. AJAY MALVIYA
26	Dewas	Mr. RAKESH SEN
27	Dewas	Mr. GOVIND PANCHAL
28	Dewas	Mr. KRISHNA PAL SINGH SOLANKI
29	Dewas	Mr. SHAILESH JAIN
30	Dewas	Mr. SHIWANAND UPADHYAY
31	Dewas	Mr. ALKESH CHANDEL
32	Dewas	Mr. PANKAJ .
33	Dewas	Mr. BRIJESH RAJAK
34	Dewas	Mr. ROHAN SINGH GOUD
35	Dewas	Mr. SOHAN .
36	Dewas	Mr. YASH KUMAR YADAV
37	Dewas	Mr. DEVENDRA KUMAR MOURYA
38	Dewas	Mr. DIPAK BHAGVAT BOROLE
39	Dewas	Mrs. RAJNI RAJAK

40	Dewas	Mr. NANDAN SHARMA
41	Dewas	Mr. RAJNEESH SAHU
42	Dewas	Mr. MAHENDRA KANT .
43	Dewas	Mr. VISHVAS PRAJAPAT
44	Dewas	Mr. RAKESH CHOUDHARY
45	Dewas	Mr. UTKARSH DUBEY
46	Dewas	Mr. VISHAL THAKUR
47	Dewas	Mr. KANHAIYA LAL BHATI
48	Dewas	Mr. SANDEEP RESWAL
49	Dewas	Mr. HARIOM NARAYAN PAL
50	Dewas	Mr. SHUBHAM PRAJAPAT
51	Dewas	Mr. PUSHPENDRA KUMAR SAHU
52	Dewas	Mr. ARJUN SINGH
53	Dewas	Mr. LAXMICHARAN JHANVAR
54	Dewas	Ms. HIMANI MALHOTRA
55	Dewas	Mr. SHEKHAR JULWANIYA
56	Dewas	Mr. SANDIP KUMAR PANDEY
57	Dewas	Mr. DEEPAK PATEL
58	Dewas	Mr. VIPUL YADAV
59	Dewas	Mr. KAMLESH RAO
60	Dewas	Mr. BHAVENDRA DESHMUKH
61	Dewas	Mr. KAMAL RATHORE
62	Dewas	Mr. KAMLESH KUMAR
63	Dewas	Mr. BRAJESH SINGH
64	Dewas	Mr. DEVENDRA BHATI