

JGL/ENV/MOEF/2023-24/056

November 29, 2023

The Additional Principal Chief Conservator of Forests(C), Minister of Environment Forests & Climate Change, 4th Floor, E&F Wing, Kendriya Sadan, 17th Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore-560034.

Subject: Submission of Six Monthly Compliance Report.

#### Reference:

- 1. Environment Clearance No. SEIAA: 54 IND 2020, dtd. 05.09.2020.
- 2. Environment Clearance No. SEIAA: 27 IND 2016, dtd. 28.04.2017.
- 3. Environment Clearance No. SEIAA: 2 IND 2007, dtd. 11.01.2010.
- 4. Environment Clearance No. J-11011/127/2005- IA II (II) dtd. 10.10.2005.
- 5. Environment Clearance No. J.11011/22/99- IA II dtd. 08.10.1999.
- 6. Environment Clearance No. J-11011/25/95- IA.II (I) dtd. 28.02.1996.
- 7. File No: EP/12.1/66/KAR 477 dated 23.08.2021
- 8. File No: EP/12.1/66/KAR 478 dated 23.08.2021

Dear Sir,

With reference to the above mentioned subject matter, please find enclosed herewith Six Monthly Compliance Report for the period of April 2023 to September 2023 for all the EC's mentioned in the reference.

This is for your information and records.

Thanking you,

Yours Faithfully,

For Jubilant Pharmova Limited

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Vice President and Site Head

A Jubilant Bhartia Company



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#### CC: 1) Environmental Officer, RO-2 Mysore (Rural), Karnataka State Pollution Control Board

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#### A Jubilant Bhartia Company



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# Compliance Report for additional conditions from Environment Clearance No.SEIAA 54 IND 2020, dtd. 05.09.2020 accorded by State Environment Impact Assessment Authority - Karnataka (constituted by MoEF, Government of India)

SI No.	Conditions	Compliance Status
	I. Statutory compliance	
1	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation)' Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	Not Applicable.
2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable.
3	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In case of the presence of schedule-1 species in the study area)	Not Applicable.
4	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 concerned State pollution Control Board/ Committee.	Complied. Consent to establish granted by KSPCB vide CTE-322748 dated 06.01.2021 and Consent to operate granted by KSPCB vide AW-326687 dated 07.09.2021. CTO is valid till 30.06.2026
5	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Complied. Hazardous waste authorisation is available and valid till 30.06.2026.
6	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 and being adhered to.

SI No.	Conditions	Compliance Status
	II . Air quality monitoring and preservation	
I	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	After receipt of EC, we applied for amendment to the condition as follows. "The project proponent shall install 24 x 7 continuous monitoring system and connect to SPCB and CPCB online servers, as per the CPCB guidelines applicable for API industry."  Copy of 'Request for Amendment to Environmental Clearance' is attached as Annexure - 1
2	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.	Complied.  VOC emissions are being monitored by MoEF recognised labs quarterly. The reports are attached as Annexure- 2
3	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.	Complied. AAQ monitoring is being carried out at four locations in the Plant area along the periphery of the Factory, 120 deg apart. Reports enclosed as Annexure-3
4	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 for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Complied. Following are the control measures available to control the fugitive emissions.  1. Closed loop handling of chemicals 2. Powder transfer systems 3. Reactor vents connected to condensers and followed by scrubbers 4. Dust extraction and collection systems 5. Mechanical seals for solvent handling pumps and reactors. 6. Boiler is operated with Bio diesel and CNG. 7. Coal fired boilers are not installed. 8. Stacks of adequate height is provided. 9. Same shall also be adhered during future expansion process.
5	Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Complied. Raw materials are stored in warehouses and same shall also be adhered during future expansion process.
6	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.	Complied. Regular monitoring of ambient air quality, Process emission, Stack emission and treated effluent are being carried out and same shall also be adhered during future expansion process. Analysis reports carried
		NANJANGUD Page 2 of 20

SI No.	Conditions	Compliance Status
		out is attached as Annexure 3(For AAQ) and Annexure 4 (for Stack and treated effluent).
7	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.	Complied. Regular monitoring of ambient air quality is being carried out and the results are meeting the NAAQS Standards and same shall also be adhered during future expansion process. Reports enclosed as Annexure-3
	III. Water quality monitoring and preservation	<u>on</u>
1	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 (applicable in case of the projects achieving ZLD)	Online continuous monitoring of parameters in the treated effluent is available and flow meter is available in the pipeline transferring treated water to cooling tower make up. Web camera and flow meter are installed and connected to CPCB server.
2	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/ treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).	Complied. Effluent treatment plant and ZLD systems are available and the treated effluent is being recycled to the utilities. Same shall also be adhered during future expansion process.
3	The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air / Water Act, whichever is more stringent.	Not applicable. Treated effluent is being recycled to the utilities for makeup and not discharged.
4	Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority / CGWA in this regard.	Complied. Fresh water requirement is not exceeding the proposed quantity. Same shall also be adhered during future expansion process.
5	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	Complied. Separate storm water channels are available. It is ensured that process effluent/waste water is not mixing with the storm water by providing containment systems. Same shall also be adhered during future expansion process.
6	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.	After receipt of EC, we applied for amendment to the condition as follows. "We request your good office to exempt us from imposing this condition as,  We have conducted a detailed Hydrogeological study during 2018 – 19. The report reveals almost 71% of the property area has ground water less than 3m in the pre-monsoon season. We have

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Sl No.	Conditions	Compliance Status
		observed during the monsoon and the post monsoon of year 2019 that the ground water table is very shallow across the area and is as low as just 12 inches in some areas. As this is water logged condition, ground water cannot be recharged with harvested rainwater in our premises. The report has been submitted to KSPCB and KGWA." Copy of 'Request for Amendment to Environmental Clearance' is attached as Annexure – 1. Further, Public Notice on 'Precautionary measures for implementation of rain water harvesting/recharge measures within industrial premises that are likely to cause pollution of ground water' issued by CGWA, clearly states that Pharmaceutical industries shall not recharge rain water within the premises.  Hence, organization has to be exempted from complying to this condition.
7	The DG sets 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.	Complied. Existing DG sets are provided with adequate stack height and meeting the guidelines. Same shall also be adhered during future expansion process.
	IV. Noise monitoring and prevention	
1	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Complied. Existing DG sets are provided with acoustic enclosures. Same shall also be adhered during future expansion process.
2	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.	Complied. Requisite control measures are available and the ambient noise levels are within the standards. Same shall also be adhered during future expansion process. Noise monitoring reports enclosed as Annexure - 5
3	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	Complied. Requisite control measures are available and the ambient noise levels are within the standards. Ambient noise levels are being monitored during day time as well as night time. Same shall also be adhered during future expansion process. Reports enclosed as Annexure - 5

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SI No.	Conditions	Compliance Status
	V. Energy Conservation measures	
1	The energy sources for lighting purposes shall preferably be LED based.	Lights are converted into LED based in past three years. Conversion to LED based lights is taken up in a phased manner and shall be expedited.
	VI. Waste management	
1	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.	Complied. Requisite control measures are available. Same shall also be adhered during future expansion process.
2	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	After receipt of EC, applied for amendment to the condition as follows. "Process organic residue and spent carbon, if any, shall be sent to cement industries and KSPCB authorised incinerators during critical situations. ETP sludge, process inorganic and evaporation salt shall be disposed off to the TSDF or Cement industries or KSPCB authorised Incinerators appropriately"  Copy of 'Request for Amendment to Environmental Clearance' is attached as Annexure - 1
		Complied.
3	The company shall undertake waste minimization measures as below:- a) Metering and control of quantities of active ingredients to minimize waste. b) Re-use 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	a) All production activities are carried out as per predefined procedures which includes measuring of active ingredients through weighing systems, flow meters and level transmitters. b) By-Products recovered are recycled by selling them to actual users. c) Level controllers/indicators are available in the reactors and storage tanks to monitor the filling process and thereby minimizing the spillage and overflow. d) Closed loop handling system, powder
	d) Use of close feed system into batch reactors	transfer systems and pressure transfer systems are available
	e) Venting equipment through vapour recovery system	e) Vents of reactors, distillation columns and driers are connected to two stage condensers to recover solvents.
	f) Use of high pressure hoses for equipment clearing to reduce wastewater generation	f) High pressure jet clean machines are used to reduce waste water generation as well as water consumption.  Same shall also be adhered during future expansion process.

NANJANGUD Page 5 of 20

SI No.	Conditions	Compliance Status	
	VII. Green Belt		
1	The green belt of 5-10m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall as per the CPCB guidelines in consultation with the State Forest Department.	Complied. Green belt area is developed around 40% area in compliance with the CPCB guidelines. Every year tree plantation is carried out to replace mortality Green belt area of 33% and the expectation shall be ensured during future expansion process.	
	VIII. Safety, Public hearing and Human healt	<i>i</i> . *	
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Complied. HIRA carried out for all the activities and based on that Onsite emergency plan as well as Offsite Emergency plan is available for critical risks. Same shall also be extended to the additional operations during future expansion process.	
2	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Complied.  Necessary portable fire extinguishers and fire hydrant systems is available as part of firefighting systems. Same shall also be maintained in the future expansion process.	
3	The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Complied. All necessary PPEs are available and is being used as and when required.	
4	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.	Complied. As part of induction program for the new employees, Safety health and environmental aspects are explained. Pre-employment and routine periodical medical examinations for all employees is being carried out annually on regular basis.	
5	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.	Major expansion activities that requires large number of construction labour are not being carried out now. The labours are mostly engaged from the local population and there is adequate facility for housing in the community nearby. Necessary infrastructure like canteen, drinking water, toilets, occupational health centre etc will be provided to take care during expansion activities.	
6	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Occupational health surveillance of the workers is being carried out on a regular basis at company's Occupational Health Center and the records maintained as per the factories Act.	

SI No.	Conditions	Compliance Status
7	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	Complied. Vehicles are allowed to park inside the plant premises. Same shall also be adhered during future expansion process.
	IX. Corporate Environment Responsibility	
1	The project authorities shall undertake activities under Corporate Environment Responsibility (CER) with a total cost of not less than Rs.432 Lakhs towards providing drinking water nearby villages, Sanitation and Waste management and Green Belt Development within five years around the project site in accordance with the O.M. F. No.22-65/2017-IA.III dated 01st May 2018 as submitted vide letter dated 04.05.2020.	Noted. During the expansion processes we will ensure that 0.5% of the project cost is allotted for executing the CER activities.
2	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 regards shall be submitted to the MoEF&CC as a part of six monthly report.	Complied. Comprehensive EHS policy is available. Compliance tracking system is available which will be reviewed by the Corporate Team in a periodical manner.
3	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.	Complied. Separate Environment Team along with Environmental Lab is available at the Site reporting to Corporate Environment Lead
4	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.	Condition noted. Existing operation is having Environmental Management Program and has the required protection measures like Effluent Treatment Plant with ZLD systems, APC measures and waste handling systems. During our expansion processes it will be ensured that the funds earmarked will be utilised for EMP activities.

Sl No.	Conditions	Compliance Status
5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Condition noted and will be adhered to.
	X. Miscellaneous	
1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied. Advertisement provided in two newspapers and the EC copy is displayed on our website.
2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied. Copy of environmental clearance is submitted to the following local bodies for displaying the same in their offices. City Municipal council, KSPCB, CPCB Bangalore, MOEF Bangalore, Department of Environment and Ecology.
3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Shall be complied. This compliance report along with monitoring details will be uploaded in the website.
4	The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Complied. PM, SO2 and NOx levels are monitored and the quantities are displayed in front of the main gate. Analysis reports are displayed in the Website along with six monthly compliance report as its annexure.
5	The project proponent shall submit six- monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied. Six monthly reports are uploaded in our website
6	The HYCRs with its contents of a covering letter, compliance reports, and environmental monitoring data has to be in PDF format merged in to a single document. The email should clearly mention the name of project, ,EC No. & date, period of submission and to be sent to the Regional Office of MoEF&CC by email only at email ID rosz.bng-mefcc@gov.in Hard copy of HYCRs shall not be acceptable".	Complied Half yearly compliance report for the period October'22 to March'23 is emailed to rosz.bng-mefcc@gov.in on 31st May

SI No.	Conditions	Compliance Status
7	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied. Environmental statement is being submitted every year within the stipulated timelines. Form V for the FY 2022-23 is submitted on 30.09.2023. Same will be continued.
8	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Condition noted and will be adhered to during our expansion process.
9	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Condition noted and will be adhered to.
10	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.	Condition noted and will be adhered to.
11	No further expansion or modifications in the plant shall be carried out without prior approval of this Authority or the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Condition noted and will be adhered to.
12	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Condition noted
13	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Condition noted
14	The SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Condition noted
15	The Regional Office of MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/ monitoring reports.	Condition noted and will be adhered to.

Sl No.	Conditions	Compliance Status
16	The above conditions shall be enforced, interalia 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.	Condition noted
17	Any appeal against this EC shall lie with the National Green Tribunal if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Condition noted

# Compliance Report for additional conditions from Environment Clearance No.SEIAA 27 IND 2016, dtd. 28.04.2017 accorded by State Environment Impact Assessment Authority - Karnataka (constituted by MoEF, Government of India)

### **Part-A: SPECIFIC CONDITIONS**

Sl No.	Condition	Compliance Status
3.	In ETP shall ensure to prevent ground water contamination due to leakage from unlined tanks	Complied.  All new tanks Installations are above ground. For tanks installed on ground, periodic integrity checks and maintenance are undertaken to prevent ground water contamination.
7.	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF – Bangalore, SEIAA, the respective zonal office of CPCB and the KSPCB. The levels of PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>X</sub> , CO, VOC (ambient levels) and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.	Compliance status to conditions of all old ECs is being sent. Compliance status for period Oct 22 to Mar 23 was emailed to rosz.bng-mefcc@gov.in on 31st May 2023.
9.	In plant control measures for checking, fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials and water sprinkling system, Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the KSPCB.	Complied.  Adequate control measures are available for minimising the fugitive emissions from all the vulnerable sources. Closed loop powder transfer systems and dust collection systems are available in powder handling areas. Closed loop pressure transfer systems, pumping systems, closed storage like tanks, drums, vent condensers are available for liquid handling. Solvent storage tanks have nitrogen blanketing systems to reduce fugitive emissions from storage tanks. Underground storage systems and insulated tank systems are being used to store more volatile solvents to reduce the vapour emissions. Fume hoods are available in Plants, QC and R&D laboratories. Work zone environment is being monitored regularly and monthly report is being submitted to Board office.
10.	Hazardous chemicals shall be stored in the tank farms, drums, carboys etc. Flame arresters shall be provided on the tank farm. Solvent transfer shall be by pumps.	Complied.  Hazardous chemicals are being stored in the tank farms, drums, carboys etc. and transferred through

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SI No.	Condition	Compliance Status
		pumps. Flame arresters are provided in the storage tanks.
14.	No effluent shall be discharged outside the factory premises and "Zero" discharge concept shall be	Complied.
	adopted.	All the process effluent generated are treated through ETP ZLD systems comprising of Physiochemical treatment, stripper, Multiple effect evaporator, Agitated Thin Film Drier, Biological treatment and reverse osmosis. Permeate from RO is used in cooling tower make up.
16.	Two staged chilled water/caustic scrubber shall	Complied.
	be provided to process vents to control HCl. Two stage scrubbers with caustic lye media solution shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.	Emission from process is passed through two stage condensers with water, chilled water/brine as cooling media to recover solvents followed by scrubber with appropriate scrubbing medium to control HCL/H <sub>2</sub> S/SO <sub>2</sub> etc. The scrubber solution is treated in Effluent treatment plant. The gaseous emissions at the outlet of scrubber are being monitored and are well below the stipulated standards.
		Reports are enclosed as Annexure-4.
17.	The hazardous and solid waste shall be disposed as per proposed EIA/EMP and the details of Hazardous & Solid waste is provided in the ANNEXURE-II along with quantity and disposal mechanism.	Complied.  Hazardous wastes are being disposed to authorized recyclers, re-processors, TSDF and Cement kilns as per our hazardous waste authorization. Solid wastes are being sent to recyclers and re-processors
18.	Incinerator Ash shall be stored separately as per	Complied.
	CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water.	Ash generated during operation of incinerator was collected in the HDPE bags and they were properly stored in the Hazardous waste storage area and disposed to common TSDF. However the incinerator is currently not being operated.
19.	During transfer of materials, spillage shall be	Complied,
	avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.	Closed loop transfer systems are available to minimise spillage. Containment systems and garland drains are available to avoid mixing of accidental spillages with domestic waste and storm drains.
21.	The unit shall make the arrangement for	Complied.
	protection of possible fire hazards during manufacturing process in material handling.	Several fire protection measures are installed like Flame proof equipment, ATEX approved equipment, grounding and bonding of equipment

SI No.	Condition	Compliance Status
	Firefighting system shall be as per OISD 117 norms.	and pipelines, use of anti-static materials, flame arresters, periodical inspection and maintenance of these systems, hot work permit systems etc. Fire fighting facilities like fire hydrant system, water monitors, foam monitors, portable fire extinguishers and fire tender is available to handle emergencies. Fire alarm systems are available.
23.	Usage of PPE's by all employees/workers shall be	Complied.
	ensured	Activity wise PPE matrix is available and PPE adherence is closely monitored.
24.	Occupational health surveillance of the workers	Complied.
	shall be done on a regular basis and records maintained as per the Factories Act.	Occupational health surveillance of the workers is being carried out on a regular basis at company's Occupational Health Center and the records maintained as per the factories Act.
27.	The company shall comply with the	Complied.
	recommendations made in the EIA/EMP/Risk assessment shall be included in the safety manual.	Recommendations from EIA/EMP are being followed. Required air pollution control measures, containment systems, monitoring systems are available.
29.	Treatment of recalcitrant 's to be documented and	Complied.
	kept at all times.	Effluents are segregated at source as Concentrated and Lean effluents. Most of the recalcitrant are separated from the system as Concentrated effluents are directly concentrated in MEE and ATFD.
30.	Adopts Good Management Practices (GMP) &	Complied.
	Green chemistry.	National and International standards like Good Manufacturing Practices, ISO 9001, ISO 14001, BS OHSAS 18001 etc. are being followed.
		Continuous efforts through Our Research and Development team to
		a) Adopt practices that improves the yield of the raw material that enhances the utilisation of resources like Raw materials, water, energy, etc.
		b) Identify alternate sources of raw materials that are less toxic and has low environment foot print.
		c) Develop alternate manufacturing processes that generates less toxic effluent and biologically degradable and less solid waste generation.

Sl No.	Condition	Compliance Status
31.	Storage facilities for the fuel shall be made in the plant area in consultation with Department of Explosives, Nagpur. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of Fuel.	Complied. Obtained PESO license from Ministry of Commerce & Industry. Storage of fuel (HSD) is complying to the conditions stipulated in the license. On-Site Emergency Management Plan is available and mock drill rehearsals are carried out in line with the Onsite- Emergency management plan.
32.	Strictly comply with the provisions of the Bio-Medical Waste Management Rules, 2016 while disposing the biomedical waste.	Complied. Obtained Biomedical Waste Authorisation and the biomedical wastes are handled and disposed to KSPCB authorised agencies.
33.	The project authorities also shall earmark at least 2.5% of the total cost of the project towards the corporate social responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Authority.	Complied. Several initiatives are being carried out as part of Corporate Social Responsibility including community welfare measures through Jubilant Bhartia Foundation (JBF) in villages around the Industry.
34.	The industry shall not operate without a functional effluent treatment plant as per the order of the Hon'ble Supreme court dated February 22, 2017 in W.P.No 375 of 2012.	Complied. Effluent treatment plant and zero liquid discharge systems are being operated to treat and recycle all the effluent generated.
В	GENERAL CONDITIONS:	
7.	Application of solar energy should be incorporated for illumination if common areas, lighting for gardens and street lighting in addition to provision of solar water heating. A hybrid system or fully solar system for lighting and heating should be provided. Details in this regard should be submitted to the SEIAA.	Complied.  Solar light are installed in the non process area.  Solar power plant of 20 KW capacities and Solar water heater of 1000 litres per day capacity is installed.

Compliance Report for additional conditions laid in Environment Clearance No. SEIAA:2: IND 2007, dtd. 11.01.2010 accorded by Karnataka State Environment Impact Assessment Authority, (constituted by Ministry of Environment and Forest, Government of India)

#### **Part - A: SPECIFIC CONDITIONS**

Sl No	Condition	Compliance Status
4.	Cyclones shall be provided to control air emissions from boilers.	Liquid fuel is used in Boilers. Required Stack height is provided based on the sulphur content of the fuel used and emissions are well within the limits.
6.	All the hazardous waste should be collected in drums and stacked, inside the premises in covered area before sent to hazardous waste disposal yard.	All the hazardous waste generated is being collected in drums and stacked inside the premises in covered area and it is being shifted/ transferred to hazardous waste disposal yard regularly.
7.	All the solid waste shall be properly collected and disposed off scientifically as prescribed by the Central/State Pollution Control Board.	The solid waste generated is properly collected and disposed off scientifically as prescribed by the KSPCB.
9.	Green belt shall be developed in at least 33% of area with suitable species of the plants as per the CPCB guidelines to mitigate the effects of fugitive emissions.	Green belt development is a continuous process as per the CPCB guidelines.
11.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	The company has already undertaken an eco- developmental measure including community welfare measures through Jubilant Bhartia foundation (JBF) in and around the factory premises for the overall improvement of the environment.
12.	The proponent shall comply with the proceedings of the technical presentation and discussion held with the Expert Committee appointed by the KSPCB on 06.11.2009.	Being complied with
14.	The project authority shall undertake a detailed study for generating baseline data on the chemical composition of the effluent and emissions both before and after each treatment and study the performances of the effluent treatment plant and emission control systems including hazardous waste management and report submitted.	Base line data collected through effluent stream segregation report. Unit performance report along with effluent stream segregation is already submitted to board office. Fugitive emissions and stack emissions is being monitored on regular basis and report is being submitted to board on regular basis.
15.	The project authority shall draw a plan for	Complied.
	a. Ground water monitoring around the SLF periodically as per the CPCB protocol and	Ground water monitoring is being carried out around SLF
	b. Continue NGRI study for improving the storm water management.	NGRI study completed and the report submitted
17.	The proponent shall take up scientific inventorization, detailed characterization of	A detailed mass balance is prepared for each of the product where in details of raw materials input,

GUD Page 15 of 20

SI No	Condition	Compliance Status
	existing multiple wastes/ residues, material balances and computation of emissions factors for gaseous emissions, liquid wastes and hazardous wastes including spent and lost solvents and report submitted.	water consumption, waste water & Solid waste generation, solvents, etc. is included.
19.	The proponent shall take appropriate measures to avoid the frequent breakdown in RO units installed.	Appropriate measures are being taken by necessary chemical treatment for membrane cleaning and changing / replacing the damaged membranes.
20.	The proponent shall take up bench scale investigation for effective treatment of wastes and its utilization. The treatability studies such as physico-chemical anaerobic / aerobic treatment /tertiary treatment, aqueous oxidative, biological process/tertiary treatment and physic chemicals processes with resource recovery followed by biological and tertiary treatment be conducted and report submitted.	Bench scale investigation for effective treatment of wastes and its utilization is being carried out in inhouse lab as well as at vendor's end.  The Environmental lab is equipped with treatability study for Physico chemical & biological treatment trials.
24.	The proponent shall ensure that drains carrying liquid wastewater and waste water collection pits are closed and kept air tight to minimize the escape of obnoxious odorous constituents.	Garland drains are already provided around the storm water drain with collection pit and pumping facility for further treatment. There is no leakage, spillage or run off process effluent into storm water drain, in case any accidental spillage happens, two bunds are provided at the end of the storm water drain to avoid run off, the same being pumped to 20KL holding tank for further treatment. The drains are closed and kept air tight, so, escape of obnoxious odorous constituents is minimized
26.	The proponent shall take up the periodic monitoring of performance of existing process vents treatment system.	Work area is being monitored on regular basis for VOC & fugitive emissions and report is being submitting to KSPCB regularly.
В	GENERAL CONDITIONS:	
2.	At no time the emissions should exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied with. The emissions are well within the limit, Pollution control system are operating round the clock, DG sets is being used as an alternate power supply in case of failure of power, standby equipment is being operated in case of any failure of the existing unit.

# Compliance Report for additional conditions stipulated in Environment Clearance accorded by MOEF vide letter no. No. J-11011/127/2005-IA II (I) Dated 10.10.2005

#### COMPLIANCE TO SPECIFIC CONDITIONS

SI No	Condition	Compliance Status
3	For control of particulate emissions, condensers and alkali scrubbers shall be provided and stacks of appropriate height as per the Central Pollution Control Board guidelines. The scrubbed water shall be sent to ETP for further treatment.	Stacks of appropriate height provided as per the Central Pollution Control Board guidelines, All the reactor vents are connected to condensers and in turn connected to scrubbers and the incinerator flue gases are scrubbed through alkali scrubber. The scrubbed water is being sent ETP for further treatment.
7	Industry shall switch over to the use of non-halogenated solvents in place of halogenated solvents in a phased manner	We are studying the possibilities of reducing halogenated solvents in place of non - halogenated solvents, if the process condition and product quality permits
8	Hazardous air pollutants emitted from the process shall be identified; assessment shall be made both for stack/vent emissions and work zone environment/ambient environment.	Hazardous air pollutants have been identified & broadly assessed. Work zone Environment monitoring is carried out regularly.
9	The company shall undertake following waste minimization measures:  a. Metering and control of quantities of active ingredients to minimize waste.  b. Reuse of by-products from the process as raw materials or as raw materials Substitutes in other processes.  c. Use of automated filling to minimize spillage.	Our Batch sizes are fixed & validation is done to get fixed & minimum solid waste.  The possibilities of directly reusing the byproducts in our manufacturing process are limited. However we are sending many of our byproducts to other small / medium scale industry where they use the same as raw material viz, Spent poly phosphoric acid for DAP manufacturer, Sodium sulphide (Na <sub>2</sub> S) to tannery industries and spent solvents to paint and thinner.  In our process all liquid charging is automated through pumps & quantities are fixed as per set point given in DCS System. So Spillage possibilities are minimized.
	d. Use of "close feed" system into batch reactors	In our process all liquid (solvents, acid & alkali) charging is automated through

Sl No	Condition	Compliance Status
		pumps & quantities are fixed as per set point given in DCS System, only minor quantities of solid and few liquid will charged through reactor manholes.
	e. Venting equipment through vapour recovery system	For all the reactors vapour condensers are provided, Condensed vapours gets condensed in this condenser and recovered & non condensable (Acidic) Vapours are passed through scrubber.
	f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation.	For equipment cleaning Clean In Place (CIP) System is designed where minimum quantity of water is being used through high-pressure hoses for clearing the equipment in place and to reduce water consumption for cleaning purposes, so that generation of waste water will be get reduced to minimum.
10	Fugitive emissions in the work zone environment, product, and raw material storage area shall be regularly monitored. The emissions shall confirm shall confirm to the limits imposed by SPCB	Fugitive emissions in the work zone environment, product, and raw material storage area are monitored at regular intervals.

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# Compliance Report for additional conditions stipulated in Environment Clearance accorded by MOEF vide letter no. No. J-11011/22/99-IA II Dated 08.10.1999

Sl No	Conditions	Compliance status
i)	The company should strictly adhere to the stipulations made by MOE&F vide O M No.J11011/25/95-1AH dated 28 February 1996.	Noted and being adhered to. During September 2020, Environmental clearance is accorded to our project vide file reference SEIAA 54 IND 2020 dated 05.09.2020 and the stipulations made in this EC is being adhered to.
iv)	Fugitive emissions in the work zone environment, product/raw material storage areas must be regularly monitored. Sensors for detecting H2S leakage should be provided at strategic locations. As reflected in the EMP H2S and SO <sub>2</sub> sensors should also be provided along the boundary wall towards the Kallahalli village side.	Work place monitoring is carried out on regular basis  H2S sensors are placed at strategic locations in the plant and alarm systems available for indication of leakage.
vi)	The hazardous solid waste (process sludge and sludge from evaporator) should be incinerated. The incinerator ash should be disposed off in a secured landfill site. The secured landfill site should be provided with impermeable HDPE lining and leachate collection facility.	Incinerable wastes are being sent to Cement industries and inorganic wastes are being sent to common TSDF approved by State Pollution control board. The secured landfill was capped in 2012 as per instructions of the Honourable KSPCB.
vii)	The ground water quality around the hazardous waste disposal site and Kallahalli village should be regularly monitored and data recorded to ensure there is no contamination of ground water.	Noted and site complies to the condition. Ground water monitoring details are being submitted half yearly to KSPCB and MoEF&CC
viii)	The company should go in for R&D programme covering technological intervention to improve the yields of various steps in order to decrease the waste generation at source itself.	Noted and site complies to the condition. R&D facility is available at site for improving and optimising the production activity.
General condition vi)	Occupational health surveillance programme should be undertaken as regular exercise for all the employees, specifically for those engaged in handling hazardous substances.	Noted and being adhered to.
vii)	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules 1989 viz 75 dB A (day time and 70 dB A(night time).	Noted and being adhered to.

# Compliance Report for additional conditions stipulated in Environment Clearance accorded by MOEF vide letter no. No. J-11011/25/95-IA II (I) Dated 28.02.1996

SI No	Condition	Compliance Status
v)	Liquid effluent generated should be treated to meet the following minimum standards  a) pH- 5.5-9.0 b) Oil & Grease – 10 mg/l c) Total Suspended Solids – 100 mg/l d) BOD 5 – 30 mg/l The quantity and quality (including general parameters) of the treated effluent should be measured regularly and data so collected should be submitted to this Ministry once in six months and the State pollution Control Board once in Three months. The effluent would also be required to meet any additional stipulation laid down by the Karnataka State pollution Control Board. The wastewater should be recycled to the extent possible. Routine toxicity test of the effluent with fish and fish food organisms also be done at least once in a month. Monitored data should be submitted to the Ministry once as well as the State pollution control board once in six months	Not applicable. Site has established ZLD system and all the treated effluent is recycled back to Cooling tower. Treated effluent parameters are submitted to the Board office and MoEF regional office once in six months.
*	The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory.	Noted
*	The above conditions will 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), 1986 and the Public Liability Insurance Act, 1991 with their amendments and rules	Noted RHARMO

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The Member Secretary. State Environmental Impact Assessment Authority. Forest, Ecology and Environment Department. Government of Karnataka. 7th Floor, 4th Wing. M.S. Building.

Subject:

Request for Amendment in Environmental Clearance

Reference:

1. No.SEIAA 54 IND 2020 dated 05-09-2020

2. Proposal No. SIA/KA/IND2/167783/2020 dated 12.08.2020

Dear Sir.

We acknowledge with thanks, the receipt of Environmental Clearance (Reference no 1) granted to our Unit based on our online application cited in reference 2.

Few of the condition stipulated in the EC would cause ambiguity due to limited interpretation of the same by the regulator and thus requires an amendment to ensure compliance by us. We request your good office to consider our request for amendment as below and grant us a a corrigendum to the EC..

#### Corrigendum requested for the following conditions

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- 1	SI# as per EC	Condition	Amendment Requested
		The project proponent shall install 24 x 7 continuous monitoring system at process stacks to monitor stack emission with respect to the standards prescribed	The project proponent shall install 24 x 7 continuous monitoring system and connect to SPCB and CPCB online servers, as per the CPCB guidelines applicable for API industry.



NANJANGUE

Page 1 of 3



JGL/EHS/SEIAA/2020-21/037

28 Oct 2020

To
The Member Secretary,
State Environmental Impact Assessment Authority.
Forest, Ecology and Environment Department,
Government of Karnataka,
7th Floor, 4th Wing,
M.S. Building,
Bangalore – 560001

Subject:

Request for Amendment in Environmental Clearance

Reference:

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#### Corrigendum requested for the following conditions

	Sl # as per EC	Condition	Amendment Requested
*	II (i)	The project proponent shall install 24 x 7 continuous monitoring system at process stacks to monitor stack emission with	The project proponent shall install 24 x 7 continuous monitoring system and connect to SPCB and CPCB online servers, as per the CPCB guidelines
1è	Company	respect to the standards prescribed	applicable for API industry. ARA

A Jubilant Pharma



Jubilant Generics Limited # Plot No. 18, 56, 57 & 58 KIADB Industrial Area, Nanjangud-571 302 Mysore, Karnataka, India Tel: +91 8221 228402-8 http://www.jubilantpharma.com  NANJANGUD Regd Oylico I-A.sockor/6-A Ngicta 201 301,UPIndia CIN:U24100UP2013F1.C060821

Page 1 of 3

SI# as per EC	Condition	Amendment Requested
TOTAL TO COLOR OF THE COLOR OF	in EP Rules 1986 and connected to SPCB and CPCB online servers.	
III (iv)	The company shall harvest the rain water from roof tops of the buildings and storm water drains to recharge the ground water and utilise the same for different industrial operations within the plant	We request your good office to exempt us from imposing this condition as,  We have conducted a detailed Hydrogeological study during 2018-19. The report reveals almost 71% of the property area has ground water table less than 3 mtrs in the premonsoon season. We have observed during the monsoon and the post monsoon season of year 2019 that the ground water table is very shallow across the area and is as low as just 12 inches some areas. As this is water logged condition, ground water cannot be recharges with harvested rainwater in our premises. The report has been submitted to the KSPCB and KGWA.
VI (ii)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic and evaporation salt shall be disposed off to the TSDF	"Process organic residue and spent carbon, if any, shall be sent to cement industries and KSPCB authorised incinerators. ETP sludge, process inorganic and evaporation salt shall be disposed off to the TSDF or Cement industries or KSPCB authorised Incinerators appropriately"

We request your good office to consider our request and issue a corrigendum to the EC in line with the above at the earliest and oblige.

Thanking You

Yours Faithfully

For Jubilant Generies Limited

Authorised Signatory

Note: All information provided/submitted herewith is commercial confidential data/information, trade secrets and/or intellectual property(s) etc. of the Company or its group Companies. The Company humbly requests you to treat the data/information submitted herewith as "Strictly Confidential", and not to provide/disclose/share any data/information to any third person/party as the same is exempted from disclosure under Section 8 of the Right to Information Act, 2005 ("RTI Act"). In the event of any person makes any application to you seeking any information about the Company, the Company requests you to please issue a prior written notice to the Company along with reasonable opportunity of representation to the Company as envisaged under Section 11(1) of the RTI Act. No disclosure of any data/information can be made to any third person/party without Company's consent under the provisions of the RTI Act

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(MoEF Recognised, FSSAI Notified Laboratory)

Test House: 294A, Hebbal Industrial Area, Mysuru - 570 016 Telephone: 2402986, 4282027 Office: 1030, Geetha Road, Chamarajapuram, Mysuru - 570 005 Telephone: 2402987, 4253825

Bengaluru Office: # 895, 2nd B Cross, Hosakere Halli, BSK 3rd Stage, Near Raghavendra Swamy Temple, Bengaluru - 560 085

Email: info@ganeshlaboratory.com, lab.ganesh@gmail.com • Web: www.ganeshlaboratory.com

ISO-9001 ISO-14001 ISO-45001 RI91/10172

**TEST REPORT** 

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description : Ambient Air 2) Sampling location : ETP Area 3) Sampled by : Lab Personnel

Page 1 of 1 Control No D-05189/2023 Customer reference Purchase Order Date of report 04-08-2023

4) Date of sampling 18-07-2023 to 19-07-2023

5) Sampling protocol IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Volatile Organic Compounds	μg/m³	75.0	Not Specified	IS-5182(Part-11):2006

NAAQ: National Ambient Air Quality Standards (NAAQ Standards CPCB Notification 18th November 2009).

Reviewed By 1 P. Enter

For GANESH CONSULTANCY & ANALYTICAL SERVICES Sas

**Authorised Signatory** 

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NOTE: 1. The results listed refer only to the tested samples and applicable parameters. Endorsement of products neither inferred nor implied.

- Total liability of our institute is limited to the Invoice amount.
  - Samples will be disposed after the specified retention period.
- This report is not to be reproduced wholly or in part and cannot be used as an evidence in Court of Law without prior permission in writing.
- 5. Sample (s) or not drawn by us unless otherwise stated.



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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description : Ambient Air
 Sampling location : Security Gate No-2 Area

3) Sampled by : Lab Personnel

Page 1 of 1
Control No D-05191/2023
Customer reference Purchase Order
Date of report 04-08-2023

4) Date of sampling

20-07-2023 to 21-07-2023

5) Sampling protocol

IS 5182

SI. No.	Test	Unit	Result	NAAQ Standards	Test Method
1	Volatile Organic Compounds	μg/m³	17.5	Not Specified	IS-5182(Part-11):2006

NAAQ: National Ambient Air Quality Standards (NAAQ Standards CPCB Notification 18th November 2009).

Reviewed By

For GANESH CONSULTANCY & ANALYTICAL SERVICES

Authorised Signatory

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited KIADB, Industrial area, Nanjangud-571302,

Sample description : Ambient Air
 Sampling location : Main Security Gate No-1 Area

3) Sampled by : Lab Personnel

Page 1 of 1
Control No D-05188/2023
Customer reference Purchase Order
Date of report 04-08-2023

4) Date of sampling

17-07-2023 to 18-07-2023

5) Sampling protocol

IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Volatile Organic Compounds	μg/m³	22.0	Not Specified	IS-5182(Part-11):2006

NAAQ: National Ambient Air Quality Standards (NAAQ Standards CPCB Notification 18th November 2009).

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited KIADB, Industrial area, Nanjangud-571302,

Sample description : Ambient Air
 Sampling location : Old Incinerator Area

3) Sampled by : Lab Personnel

Page 1 of 1
Control No D-05190/2023
Customer reference Purchase Order
Date of report 04-08-2023

4) Date of sampling 19-07-2023 to 20-07-2023

5) Sampling protocol IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Volatile Organic Compounds	μg/m³	77.14	Not Specified	IS-5182(Part-11):2006

NAAQ: National Ambient Air Quality Standards (NAAQ Standards CPCB Notification 18th November 2009).

Reviewed By

Muna

For GANESH CONSULTANCY & ANALYTICAL SERVICES

Authorised Signatory

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description : Ambient Air
 Sampling location : Kallahalli Village Area

3) Sampled by : Lab Personnel

Page 1 of 1
Control No D-05173/2023
Customer reference Purchase Order
Date of report 04-08-2023

4) Date of sampling

24-07-2023 to 25-07-2023

5) Sampling protocol IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Volatile Organic Compounds	μg/m³	BDL (DL <10)	Not Specified	IS-5182(Part-11):2006

BDL Below Detection Limit, DL: Detection Limit.

NAAQ: National Ambient Air Quality Standards (NAAQ Standards CPCB Notification 18th November 2009).

\*\*\*\*\*\*

Reviewed By

For GANESH CONSULTANCY & ANALYTICAL SERVICES

Authorised Signatory

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2 Total liability of our institute is limited to the Invoice amount.

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## Ganesh Consultancy & Analytical Services



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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB. Industrial area, Nanjangud-571302,

Sample description : Ambient Air
 Sampling ocation: ETP Area
 Sampled by : Lab Personnel

Control No Customer reference Date of report Page 1 of 1 D-05189/2023 Purchase Order 04-08-2023

4) Date of sampling 5) Duration of sampling 26) Sampling protocol 1

18-07-2023 to 19-07-2023

24 Hrs. IS 5182

SI. No.	Test	Unit	Result	NAAQ Standards	Test Method
1	Sulphur dioxide	μg/m³	6.90	80	IS 5182 P-2:2001 (RA:2017)
2	Nitrogen Dioxides	μg/m³	36.88	80	IS 5182 P-6:2006 (RA:2017)
3	Particulate Matter (Size less than 10 µm)	μg/m³	51.32	100	IS 5182 P-23:2006 (RA-2017)
4	Particulate Matter (Size less than 2.5 µm)	μg/m³	17.26	60	IS 5182 P-24:2019
5	Ozone	μg/m³	BDL (DL: 0.01)	100	GCAS/SOP/7.2/AA/O3 IssueNo-1 Issue date:18/11/2019
6	Lead	μg/m³	BDL (DL: 0.001)	1.0	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
7	Carbon Monoxide	mg/m³	BDL (DL:1.10)	4	IS 5182 P-10 :1999(RA:2019)
8	Ammonia	μg/m³	1.75	400	IS 5182 P-25:2018
9	Benzene	µg/m³	BDL (DL: 0.01)	5	IS 5182 P-11:2006 (RA:2017)
10	Benzo (a) Pyrene - (BaP) particulate phase only	ng/m³	BDL (DL: 0.01)	1	GCAS/SOP/7.2/AA/BaP IssueNo-1 Issue date:18/11/2019
11	Arsenic	ng/m³	BDL (DL: 1.0)	6	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
12	Nickel	ng/m³	BDL (DL: 1.0)	20	GCAS/SOP/7.2/AA/M IssueNo-1Issue date:18/11/2019

BDL: Below detection limit, DL: Detection limit.

NAAQ: The National Ambient Air Quality Standards.

Comments: The test result meets the NAAQ standards.

\*\*\*\*\*\*

Reviewed By

For GANESH CONSULTANCY & ANALYTICAL SERVICES

**Authorised Signatory** 

NOTE: 1. The results listed refer only to the tested samples and applicable parameters. Endorsement of products neither inferred nor implied.

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### TEST REPORT

CUSTOMER ADDRESS. M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description : Ambient Air

2) Sampling location: Security Gate No. 2 Area
3) Sampled by : Lab Personnel

Control No Customer reference

Date of report

4) Date of sampling

5) Duration of campling 6) Sampling protocol

20-07-2023 to 21-07-2023

D-05191/2023

Purchase Order

04-08-2023

24 Hra. IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Sulphur dioxide	μg/m³	6.84	80	IS 5182 P-2:2001 (RA:2017)
2	Nitrogen Dioxides	μg/m³	34.18	80	IS 5182 P-6:2006 (RA:2017)
3	Particulate Matter (Size less than 10 µm)	μg/m³	52.29	100	IS 5182 P-23:2006 (RA-2017)
4	Particulate Matter (Size less than 2.5 µm)	μg/m³	17.32	60	IS 5182 P-24:2019
5	Ozone	μg/m³	BDL (DL: 0.01)	100	GCAS/SOP/7:2/AA/O3 IssueNo-1 Issue date:18/11/2019
6	Lead	µg/m³	BDL (DL: 0.001)	1.0	GCAS/SOP/7:2/AA/M IssueNo-1 Issue date:18/11/2019
7	Carbon Monoxide	mg/m³	BDL (DL: 1.10)	4	IS 5182 P-10 :1999(RA:2019)
8	Ammonia	μg/m³	BDL (DL: 1.0)	400	IS 5182 P-25:2018
9	Benzene	μg/m³	BDL (DL : 0.01)	5	IS 5182 P-11:2006 (RA:2017)
10	Benzo (a) Pyrene - (BaP) particulate phase only	ng/m³	BDL (DL : 0.01)	1	GCAS/SOP/7.2/AA/BaP IssueNo-1 Issue date:18/11/2019
11	Arsenic	ng/m³	BDL (DL : 1.0)	6	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
12	Nickel	ng/m³	BDL (DL: 1.0)	20	GCAS/SOP/7.2/AA/M IssueNo-1Issue date:18/11/2019

BDL: Below detection limit, DL: Detection limit.

NAAQ: The National Ambient Air Quality Standards.

Comments: The test result meets the NAAQ standards.

Reviewed By

For GANESH CONSULTANCY & ANALYTICAL SERVICES

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS. M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description : Ambient Air

2) Sampling location: Main Security Gate No. 1 Area 3) Sampled by Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-05188/2023 Purchase Order 04-08-2023

4) Date of sampling

5) Duration of sampling 6) Sampling protocol

17-07-2023 to 18-07-2023

24 Hrs. IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Sulphur dioxide	μg/m³	6.46	80	IS 5182 P-2:2001 (RA:2017)
2	Nitrogen Dioxides	μg/m³	34.42	80	IS 5182 P-6:2006 (RA:2017)
3	Particulate Matter (Size less than 10 µm)	μg/m³	48.47	100	IS 5182 P-23:2006 (RA-2017)
4	Particulate Matter (Size less than 2.5 µm)	μg/m³	16,63	60	IS 5182 P-24:2019
5	Ozone	μg/m³	BDL (DL: 0.01)	100	GCAS/SOP/7.2/AA/O3 IssueNo-1 Issue date:18/11/2019
6	Lead	μg/m³	BDL (DL: 0.001)	1.0	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
7	Carbon Monoxide	mg/m³	BDL (DL:1.10)	4	IS 5182 P-10 :1999(RA:2019)
8	Ammonia	μg/m³	BDL (DL:1.0)	400	IS 5182 P-25:2018
9	Benzene	μg/m³	BDL (DL: 0.01)	5	IS 5182 P-11:2006 (RA:2017)
10	Benzo (a) Pyrene - (BaP) particulate phase only	ng/m³	BDL (DL: 0.01)	1	GCAS/SOP/7.2/AA/BaP IssueNo-1 Issue date:18/11/2019
11	Arsenic	ng/m³	BDL (DL: 1.0)	6	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
12	Nickel	ng/m³	BDL (DL: 1.0)	20	GCAS/SOP/7.2/AA/M IssueNo-1Issue date:18/11/2019

BDL: Below detection limit, DL: Detection limit.

NAAQ: The National Ambient Air Quality Standards.

Comments: The test result meets the NAAQ standards.

Reviewed By

For GANESH CONSULTANCY & ANALYTICAL SERVICES

**Authorised Signatory** 

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description : Ambient Air

2) Sampling location: Plant-4 MCC Terrace Area,

: Lab Personnel

Control No Customer reference Date of report

D-05190/2023 Purchase Order 04-08-2023

4) Date of sampling

19-07-2023 to 20-07-2023 5) Duration of sampling 24 Hrs.

6) Sampling protocol IS 5182

SI. No.	Test	Unit	Result	NAAQ Standards	Test Method
1	Sulphur dioxide	μg/m³	7.44	80	IS 5182 P-2:2001 (RA:2017)
2	Nitrogen Dioxides	μg/m³	37.10	80	IS 5182 P-6:2006 (RA:2017)
3	Particulate Matter (Size less than 10 µm)	μg/m³	53.40	100	IS 5182 P-23:2006 (RA-2017)
4	Particulate Matter (Size less than 2.5 µm)	μg/m³	18.43	60	IS 5182 P-24:2019
5	Ozone	μg/m³	BDL (DL: 0.01)	100	GCAS/SOP/7.2/AA/O3 IssueNo-1 Issue date:18/11/2019
6	Lead	μg/m³	BDL (DL: 0.001)	1.0	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
7	Carbon Monoxide	mg/m³	BDL (DL:1.10)	4	IS 5182 P-10 :1999(RA:2019)
8	Ammonia	μg/m³	1.78	400	IS 5182 P-25:2018
9	Benzene	μg/m³	BDL (DL: 0.01)	5	IS 5182 P-11:2006 (RA:2017)
10	Benzo (a) Pyrene - (BaP) particulate phase only	ng/m³	BDL (DL: 0.01)	1	GCAS/SOP/7.2/AA/BaP IssueNo-1 Issue date:18/11/2019
11	Arsenic	ng/m³	BDL (DL: 1.0)	6	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
12	Nickel	ng/m³	BDL (DL: 1.0)	20	GCAS/SOP/7.2/AA/M IssueNo-1Issue date: 18/11/2019

BDL: Below detection limit, DL: Detection limit.

NAAQ: The National Ambient Air Quality Standards.

Comments: The test result meets the NAAQ standards

Reviewed By



For GANESH CONSULTANCY & ANALYTICAL SERVICES

**Authorised Signatory** 

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

#### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

2) Sampling location : Kallahalli Village. Temple Area 3) Sampled by

1) Sample description : Ambient Air

: Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-05172/2023 Purchase Order 04-08-2023

4) Date of sampling 5) Duration of sampling 6) Sampling protocol

24-07-2023 to 25-07-2023

24 Hrs. IS 5182

SI. No	Test	Unit	Result	NAAQ Standards	Test Method
1	Sulphur dioxide	μg/m³	8.48	80	IS 5182 P-2:2001 (RA:2017)
2	Nitrogen Dioxides	μg/m³	38,10	80	IS 5182 P-6:2006 (RA:2017)
3	Particulate Matter (Size less than 10 µm)	μg/m³	57.43	100	IS 5182 P-23:2006 (RA-2017)
4	Particulate Matter (Size less than 2.5 µm)	μg/m³	19.61	60	IS 5182 P-24:2019
5	Ozone	μg/m³	BDL (DL: 0.01)	100	GCAS/SOP/7.2/AA/O3 IssueNo-1 Issue date:18/11/2019
6	Lead	μg/m³	BDL (DL: 0.001)	1.0	GCAS/SOP/7:2/AA/M IssueNo-1 Issue date:18/11/2019
7	Carbon Monoxide	mg/m³	BDL (DL:1.10)	4	IS 5182 P-10 :1999(RA:2019)
8	Ammonia	μg/m³	BDL (DL:1.0)	400	IS 5182 P-25:2018
9	Benzene	μg/m³	BDL (DL: 0.01)	5	IS 5182 P-11:2006 (RA:2017)
10	Benzo (a) Pyrene - (BaP) particulate phase only	ng/m³	BDL (DL: 0.01)	1	GCAS/SOP/7.2/AA/BaP IssueNo-1 Issue date:18/11/2019
11	Arsenic	ng/m³	BDL (DL: 1.0)	6	GCAS/SOP/7.2/AA/M IssueNo-1 Issue date:18/11/2019
12	Nickel	ng/m³	BDL (DL: 1.0)	20	GCAS/SOP/7.2/AA/M IssueNo-1Issue date:18/11/2019

BDL: Below detection limit, DL: Detection limit.

NAAQ: The National Ambient Air Quality Standards.

Comments: The test result meets the NAAQ standards.

Reviewed By A. M. Asserments For GANESH CONSULTANCY & ANALYTICAL SERVICES

**Authorised Signatory** 

NOTE: 1. The results listed refer only to the tested samples and applicable parameters. Endorsement of products neither inferred nor implied.

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personnel

Control No Customer reference Date of report Page 1 of 1 D-06476/2023 Purchase Order 04-10-2023

3) Date of Sampling4) Sampling protocol

22-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-1, Scrubber-1001
2	Stack Height above Ground	24 m
3	Stack diameter	0.50 m
4	Cross Section Area	0.1964 m²
5	Ambient Temperature	34°C
6	Flue gas Temperature	28°C
7	Flue gas Velocity	5.77 m/sec
8	Quantity of Flue gas discharges into the atmosphere	3718.98 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4,78	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	3.16	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	18.66	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.22	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	1.35	USEPA Method - 8
6	Hydrogen sulphide	ppmv	BDL (DL:1.0)	IS 11255 (Part-4):2006

Note: BDL: Below Detection Limit, DL: Detection Limit.

Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

\*\*\*End of the Report\*\*\*

Reviewed By



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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1
0 D-06477/2023
reference Purchase Order
port 04-10-2023

3) Date of Sampling 22-09-2023 4) Sampling protocol IS 11255

SI, No	General parameters	Details of stack
1	Stack connected to	Plant-1, Scrubber-1003
2	Stack Height above Ground	24 m
3	Stack diameter	0.23 m
4	Cross Section Area	0.0416 m <sup>2</sup>
5	Ambient Temperature	33°C
6	Flue gas Temperature	29°C
7	Flue gas Velocity	10.01 m/sec
8	Quantity of Flue gas discharges into the atmosphere	1361.27 Nm³/hr
CONCRETE		######################################

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	6.78	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm <sup>3</sup>	3.20	13 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	19.45	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.75	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.64	USEPA Method - 8
6	Hydrogen sulphide	ppmv	BDL (DL:1.0)	IS 11255 (Part-4):2006

Note: BDL: Below Detection Limit, DL: Detection Limit.

Details of Equipment used for	monitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

\*\*\*End of the Report\*\*\*

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab l'ersonnel Control No Customer reference Date of report

Page 1 of 1 D-06479/2023 Purchase Order 04-10-2023

3) Date of Sampling 25-09-2023 4) Sampling protocol IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-3, Scrubber-3001
2	Stack Height above Ground	20 M
3	Stack diameter	0.20 m
4	Cross Section Area	0.0314 m <sup>2</sup>
5	Ambient Temperature	30°C
6	Flue gas Temperature	30°C
7	Flue gas Velocity	5.68 m/sec
8	Quantity of Flue gas discharges into the atmosphere	581.45 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	6.43	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	2.35	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	16.10	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.76	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.22	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Note: BDL: Below Detection Limit, DL: Detection Limit.

Details of Equipment used for monitoring		
Model	ESS-100	
SL. No.	21-K-360	
Calibration Due Date	10-02-2024	

\*\*\*End of the Report\*\*\*

Reviewed By 1. Turneres



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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

D-06478/2023 Purchase Order 04-10-2023

3) Date of Sampling 4) Sampling protocol 25-09-2023 IS 11255

Page 1 of 1

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-3, Scrubber-3002
2	Stack Height above Ground	20 M
3	Stack diameter	0.20 m
4	Cross Section Area	0.0314 m <sup>2</sup>
5	Ambient Temperature	30°C
6	Flue gas Temperature	27°C
7	Flue gas Velocity	9.36 m/sec
8	Quantity of Flue gas discharges into the atmosphere	967.27 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4.20	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	2.52	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	16.10	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.42	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	0.86	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Note: BDL: Below Detection Limit, DL: Detection Limit.

Details of Equipment used for monitoring		
Model	ESS-100	
SL. No.	21-K-360	
Calibration Due Date	10-02-2024	

<sup>\*\*\*</sup>End of the Report\*\*\*

Reviewed By

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06467/2023 Purchase Order 04-10-2023

3) Date of Sampling 20-09-2023 4) Sampling protocol IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-4, Scrubber-4001
2	Stack Height above Ground	15 m
3	Stack diameter	0.20 m
4	Cross Section Area	0.0314 m <sup>2</sup>
5	Ambient Temperature	33°C
6	Flue gas Temperature	28°C
7	Flue gas Velocity	6.54 m/sec
8	Quantity of Flue gas discharges into the atmosphere	671.94 Nm³/hr
et vintrientellos?		- CACACACA

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4.78	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	2.52	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	18.10	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1,44	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.16	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

\*\*\*End of the Report\*\*\*

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personn

Control No Customer reference Date of report

Page 1 of 1 D-02656/2023 e Purchase Order 25-04-2023

3) Date of Sampling4) Sampling protocol

14-04-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-5, Scrubber-5001
2	Stack Height above Ground	15 m
3	Stack diameter	0.20 m
4	Cross Section Area	0.0314 m²
5	Ambient Temperature	33°C
6	Flue gas Temperature	33°C
7	Flue gas Velocity	6.42 m/sec
8	Quantity of Flue gas discharges into the atmosphere	651.64 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	6.92	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	1.75	IS 11255 (Part-2);1985
3	Oxides of Nitrogen	mg/Nm³	18.45	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.51	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.15	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by

Control No Customer reference Date of report

Page 1 of 1 D-06468/2023 Purchase Order 04-10-2023

3) Date of Sampling 20-09-2023 4) Sampling protocol IS 11255

SI. No General parameters	Details of stack
1 Stack connected to	Plant-5, Scrubber-5002
2 Stack Height above Ground	15 m
3 Stack diameter	0.16 m
4 Cross Section Area	0.0201 m <sup>2</sup>
5 Ambient Temperature	31°C
6 Flue gas Temperature	27°C
7 Flue gas Velocity	8.71 m/sec
8 Quantity of Flue gas discharges into the atmosphere	574.58 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	5.83	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	1.85	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	14.22	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.36	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	1.36	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Control No Customer reference Date of report

Page 1 of 1 D-06471/2023 Purchase Order 04-10-2023

1) Sample description: Flue Gas 2) Sampled by

: Lab Personnel

3) Date of Sampling 4) Sampling protocol 21-09-2023 IS 11255

SI. No	General parameters	Details of stack
1 -	Stack connected to	Plant-6, Scrubber-61001
2	Stack Height above Ground	15 m
3	Stack diameter	0.25 m
4	Cross Section Area	0.0491 m <sup>2</sup>
5	Ambient Temperature	31°C
6	Flue gas Temperature	27°C
7	Flue gas Velocity	6.71 m/sec
8	Quantity of Flue gas discharges into the atmosphere	1081.61 Nm <sup>3</sup> /hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	6.26	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	1.68	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	16.10	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1,86	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.10	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Details of Equipment used for me	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by Lab Personnel

Control No Customer reference Date of report Page 1 of 1 D-06472/2023 Purchase Order 04-10-2023

3) Date of Sampling4) Sampling protocol

21-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-6, Scrubber-61002
2	Stack Height above Ground	15 m
3	Stack diameter	C.16 m
4	Cross Section Area	C.C201 m <sup>2</sup>
5	Ambient Temperature	31°C
6	Flue gas Temperature	29°C
7	Flue gas Velocity	3.27 m/sec
8	Quantity of Flue gas discharges into the atmosphere	214.41 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4.69	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	1.85	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	17.22	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.55	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	0.98	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Details of Equipment used for monitoring			
Model	ESS-100		
SL, No.	21-K-360		
Calibration Due Date	10-02-2024		

<sup>\*\*\*</sup>End of the Report\*\*\*

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06473/2023 Purchase Order 04-10-2023

3) Date of Sampling 21-09-2023 4) Sampling protocol IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-6, Scrubber-61301
2	Stack Height above Ground	15 m
3	Stack diameter	0.365 m
4	Cross Section Area	0.01047 m <sup>2</sup>
5	Ambient Temperature	31°C
6	Flue gas Temperature	30°C
7	Flue gas Velocity	11.56 m/sec
8	Quantity of Flue gas discharges into the atmosphere	3944.04 Nm³/hr
MENGRADO AND A		24 ALERS CO. S. C.

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4.82	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	2.18	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	15,12	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.75	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.22	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.3)	GCAS/SOP/7.2/SE/HA

Details of Equipment used for monitoring		
Model	ESS-100	
SL. No.	21-K-360	
Calibration Due Date	10-02-2024	

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06474/2023 Purchase Order 04-10-2023

3) Date of Sampling 4) Sampling protocol 21-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-6, Scrubber-61302
2	Stack Height above Ground	15 m
3	Stack diameter	0.20 m
4	Cross Section Area	0.0314 m <sup>2</sup>
5	Ambient Temperature	31°C
6	Flue gas Temperature	28°C
7	Flue gas Velocity	4.22 m/sec
8	Quantity of Flue gas discharges into the atmosphere	433.67 Nm³/hr
000000000000000000000000000000000000000		A CONTROL OF THE PROPERTY OF T

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	6.78	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	3.36	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	18.10	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.44	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	1.64	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Details of Equipment used for monitoring		
Model	ESS-100	
SL. No.	21-K-360	
Calibration Due Date	10-02-2024	

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-06470/2023 Purchase Order 04-10-2023

3) Date of Sampling4) Sampling protocol

21-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-6, Scrubber-63301
2	Stack Height above Ground	15 m
3	Stack diameter	0.25 m
4	Cross Section Area	0.0491 m <sup>2</sup>
5	Ambient Temperature	29°C
6	Flue gas Temperature	27°C
7	Flue gas Velocity	12.18 m/sec
8	Quantity of Flue gas discharges into the atmosphere	1961.12 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	4.10	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	2.52	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	18.12	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.90	IS 13270:1992 (RA 2019)
5	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	1.84	USEPA Method - 8
6	Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA

Details of Equipment used for monitoring			
Model	ESS-100		
SL. No.	21-K-360		
Calibration Due Date	10-02-2024		

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-02662/2023 Purchase Order 25-04-2023

3) Date of Sampling 15-04-2023 4) Sampling protocol IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Plant-6, Scrubber-61003
2	Stack Height above Ground	15 m
3	Stack diameter	0.16 m
4	Cross Section Area	0.0201 m <sup>2</sup>
5	Ambient Temperature	34°C
6	Flue gas Temperature	32°C
7	Flue gas Velocity	5.37 m/sec
8	Quantity of Flue gas discharges into the atmosphere	350.09 Nm³/hr

Test	Unit	Result	Test method
Particulate Matter	mg/Nm³	4.64	IS 11255 (Part-1):1985
Sulphur dioxide	mg/Nm³	1.82	IS 11255 (Part-2):1985
Oxides of Nitrogen	mg/Nm³	14.49	IS 11255 (Part-7):1985
Hydro carbon	mg/Nm³	1.26	IS 13270:1992 (RA 2019)
Acid Mist as H₂SO₄	mg/Nm³	1.30	USEPA Method - 8
Hydrozoic Acid	mg/Nm³	BDL (DL:1.0)	GCAS/SOP/7.2/SE/HA
and the same of the contract o	Particulate Matter Sulphur dioxide Oxides of Nitrogen Hydro carbon Acid Mist as H <sub>2</sub> SO <sub>4</sub>	Particulate Matter mg/Nm³ Sulphur dioxide mg/Nm³ Oxides of Nitrogen mg/Nm³ Hydro carbon mg/Nm³ Acid Mist as H <sub>2</sub> SO <sub>4</sub> mg/Nm³	Particulate Matter mg/Nm³ 4.64  Sulphur dioxide mg/Nm³ 1.82  Oxides of Nitrogen mg/Nm³ 14.49  Hydro carbon mg/Nm³ 1.26  Acid Mist as H₂SO₄ mg/Nm³ 1.30

Details of Equipment used for monitoring				
Model		ESS-100		
SL. No.		21-K-360		
Calibration Due	Date	10-02-2024		

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06469/2023 Purchase Order 04-10-2023

3) Date of Sampling 4) Sampling protocol 20-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	Pilot Plant Scrubber -6001
2	Stack Height above Ground	15 m
3	Stack diameter	0.10 m
4	Cross Section Area	0.0078 m <sup>2</sup>
5	Ambient Temperature	32 °C
6	Flue gas Temperature	28°C
7	Flue gas Velocity	4.08 m/sec
8	Quantity of Flue gas discharges into the atmosphere	104.60 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	7.23	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	1.18	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	17.22	IS 11255 (Part-7):1985
4	Hydro carbon	mg/Nm³	1.72	IS 13270:1992 (RA 2019)
5	Acid Mist as H₂SO₄	mg/Nm³	1.25	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL: No.	21-K-360
Calibration Due Date	10-02-2024

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06475/2023 Purchase Order 04-10-2023

3) Date of Sampling 4) Sampling protocol 22-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	15 TPH Boiler
2	Stack Height above Ground	54 m
3	Stack diameter	1.0 m
4	Cross Section Area	0.7857 m <sup>2</sup>
5	Ambient Temperature	35°C
6	Flue gas Temperature	116°C
7	Flue gas Velocity	8.03 m/sec
8	Quantity of Flue gas discharges into the atmosphere	15973.14 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	95.54	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	14.95	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	36.10	IS 11255 (Part-7):1985
4	Carbon monoxide	mg/Nm³	107.63	GCAS/SOP/7.2/SE/CO
5	Carbon dioxide	%	4.62	GCAS/SOP/7.2/SE/CO <sub>2</sub>
6	Acid Mist as H <sub>2</sub> SO <sub>4</sub>	mg/Nm³	18.10	USEPA Method - 8
7	Non Methane Hydrocarbon	mg/Nm³	12.16	IS 13270:1992 (RA 2019)
8	Hydrocarbon	mg/Nm³	6.42	IS 13270:1992 (RA 2019)

Note: The Results are Correction at 11 % O<sub>2</sub>

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

\*\*\*End of the Report\*\*\*

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas
2) Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1
D-06480/2023
erence Purchase Order
ort 04-10-2023

3) Date of Sampling

24-09-2023

			10-202
Sampl			1255

SI. No	General parameters	Details of stack
1	Stack connected to	DG-2250 KVA
2	Stack Height above Ground	30 m
က	Stack diameter	0.45 m
4	Cross Section Area	0.1519 m <sup>2</sup>
5	Ambient Temperature	34°G
6	Flue gas Temperature	459°C
7	Flue gas Velocity	29.08 m/sec
8	Quantity of Flue gas discharges into the atmosphere	6235.09 Nm³/hr

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	13.56	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	35.95	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	122.45	IS 11255 (Part-7);1985
4	Carbon monoxide	mg/Nm³	104.20	GCAS/SOP/7.2/SE/CO
5	Carbon dioxide	%	7.42	GCAS/SOP/7.2/SE/CO <sub>2</sub>
6	Non Methane Hydrocarbon	mg/Nm³	4.29	IS 13270:1992 (RA 2019)
7	Hydro carbon	mg/Nm³	7.16	IS 13270:1992 (RA 2019)
8	Acid Mist	mg/Nm³	22.39	USEPA Method - 8

Details of Equipment used for monitoring		
Model	ESS-100	
SL. No.	21-K-360	
Calibration Due Date	10-02-2024	

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ISO-9001 ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas 2) Sampled by : Lab Personnel Control No Customer reference Date of report

Page 1 of 1 D-06481/2023 Purchase Order 04-10-2023

3) Date of Sampling 4) Sampling protocol

24-09-2023 IS 11255

Details of stack
DG-1500 KVA

SI. No	General parameters	Details of stack	
1	Stack connected to	DG-1500 KVA	
2	Stack Height above Ground	30 m	
3	Stack diameter	0.50 m	
4	Cross Section Area	0.1591 m²	
5	Ambient Temperature	33°C	
6	Flue gas Temperature	428°C	
7	Flue gas Velocity	28.08 m/sec	
8	Quantity of Flue gas discharges into the atmosphere	7761.52 Nm³/hr	
60.750.0000			

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	14.20	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	34.94	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	116.10	IS 11255 (Part-7):1985
4	Carbon monoxide	mg/Nm³	110.50	GCAS/SOP/7.2/SE/CO
5	Carbon dioxide	%	7.20	GCAS/SOP/7.2/SE/CO <sub>2</sub>
6	Non Methane Hydrocarbon	mg/Nm³	5.10	IS 13270:1992 (RA 2019)
7	Hydro carbon	mg/Nm³	8.12	IS 13270:1992 (RA 2019)
8	Acid Mist	mg/Nm³	20.24	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. Nc.	21-K-360
Calibration Due Date	10-02-2024

<sup>\*\*\*</sup>End of the Report\*\*\*

Reviewed By Murezes



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### **TEST REPORT**

CUSTOMER ADDRESS, M/s Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-06482/2023 ference Purchase Order ort 04-10-2023

Date of Sampling
 Sampling protocol

24-09-2023 IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	DG-725 KVA No. 2 Common chimney
2	Stack Height above Ground	30 m
3	Stack diameter	0.50 m
4	Cross Section Area	0.1964 m²
5	Ambient Temperature	34°G
6	Flue gas Temperature	426°C
7	Flue gas Velocity	14.39 m/sec
8	Quantity of Flue gas discharges into the atmosphere	3991.91 Nm³/hr
		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	12.67	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	31,92	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	122.45	IS 11255 (Part-7):1985
4	Carbon monoxide	mg/Nm³	181	GCAS/SOP/7.2/SE/CO
5	Carbon dioxide	%	7.12	GCAS/SOP/7.2/SE/CO2
6	Non Methane Hydrocarbon	mg/Nm³	4.16	IS 13270:1992 (RA 2019)
7	Hydro carbon	mg/Nm³	7.90	IS 13270:1992 (RA 2019)
8	Acid Mist	mg/Nm³	18.47	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

<sup>\*\*\*</sup>End of the Report\*\*\*

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

Sample description: Flue Gas
 Sampled by : Lab Personnel

Control No Customer reference Date of report

Page 1 of 1 D-06483/2023 e Purchase Order 04-10-2023

3) Date of Sampling 24-09-2023 4) Sampling protocol IS 11255

SI. No	General parameters	Details of stack
1	Stack connected to	DG-2000 KVA
2	Stack Height above Ground	30 m
3	Stack diameter	0.50 m
4	Cross Section Area	0.1964 m <sup>2</sup>
5	Ambient Temperature	34°C
6	Flue gas Temperature	372°C
7	Flue gas Velocity	14.19 m/sec
8	Quantity of Flue gas discharges into the atmosphere	4265.81 Nm³/hr

SI, No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	14.61	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	29.74	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	116.10	IS 11255 (Part-7):1985
4	Carbon monoxide	mg/Nm³	119	Lab SOP-CO
5	Carbon dioxide	%	6.0	Lab SOP-CO <sub>2</sub>
6	Non Methane Hydrocarbon	mg/Nm³	5.22	USEPA Method - 8
7	Hydro carbon	mg/Nm³	10.10	Lab SOP-HC
8	Acid Mist	mg/Nm³	17.49	Lab SOP- AM (S)

Model ESS-100	
01 1	
SL. No. 21-K-360	W.

\*\*\*End of the Report\*\*\*

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Flue Gas
2) Sampled by : Lab Personnel

Control No Customer reference Date of report Page 1 of 1 D-06484/2023 Purchase Order 04-10-2023

3) Date of Sampling4) Sampling protocol

24-09-2023 IS 11255

1 Stack connected to	DG-725 KVA No. 1
	Common chimney
2 Stack Height above Ground	30 m
3 Stack diameter	0.50 m
4 Cross Section Area	0.1964 m <sup>2</sup>
5 Ambient Temperature	34°C
6 Flue gas Temperature	450°C
7 Flue gas Velocity	14:67 m/sec
8 Quantity of Flue gas discharges into the atmosphere	3934.49 Nm³/hr

10.64				
SI. No	Test	Unit	Result	Test method
1	Particulate Matter	mg/Nm³	11.25	IS 11255 (Part-1):1985
2	Sulphur dioxide	mg/Nm³	34.10	IS 11255 (Part-2):1985
3	Oxides of Nitrogen	mg/Nm³	126.45	IS 11255 (Part-7):1985
4	Carbon monoxide	mg/Nm³	195	GCAS/SOP/7.2/SE/CO
5	Carbon dioxide	%	7.0	GCAS/SOP/7.2/SE/CO2
6	Non Methane Hydrocarbon	mg/Nm³	4.35	IS 13270:1992 (RA 2019)
7	Hydro carbon	mg/Nm³	8.72	IS 13270:1992 (RA 2019)
8	Acid Mist	mg/Nm³	19.45	USEPA Method - 8

Details of Equipment used for m	onitoring
Model	ESS-100
SL. No.	21-K-360
Calibration Due Date	10-02-2024

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area. Nanjangud-571302.

1) Sample description: Water

2) Sample Marked as: ETP RO Permeate Water.

3) Sample collected location: Not Specified

4) Sample Package / Quantity: PET Bottle, 1 Liter

Control No Customer Ref Date of Sample Collection Date of Sample Receipt Date of Commencement Date of Completion Date of Report 5) Sample Condition:

6) Sample Code/batch No

7) Sample Drawn By 8) Sampling Protocol

Page 1 of 1 C-07429/2023 Purchase Order 22-09-2023 22-09-2023 23-09-2023 28-09-2023

29-09-2023 Satisfactory Not Specified Lab. Personnel IS 3025

Unit Result Test Method Test pH Value 7.39 IS: 3025 (P 11) 2 Total Suspended Solids mg/l 6 IS: 3025 (P 17) 3 **Total Dissolved Solids** 180 IS: 3025 (P 16) mg/l 4 Oil & Grease mg/l BDL (DL 2) IS:3025 (P 39) 2.19 IS:3025 (P 31) 5 Phosphate as PO<sub>4</sub> mg/l 6 Total Hardness as CaCO<sub>3</sub> mg/l IS: 3025 (P 21) Calcium as Ca mg/l 1.6 IS: 3025 (P 40) IS: 3025 (P 46) 8 Magnesium as Mg mg/l 0.72 134 IS: 3025 (P 23) 9 Total Alkalinity as CaCO<sub>3</sub> mg/l Chloride as Cl 121 IS: 3025 (P 32) 10 mg/l 3 IS: 3025 (P 24) 11 Sulphate as SO<sub>4</sub> mg/l 12 Iron as Fe mg/l 0.38 IS: 3025 (P 53) 13 Sodium as Na mg/l 12.45 IS: 3025 (P 45) 14 Chemical Oxygen Demand mg/l 43 IS:3025 (P 58) Biochemical Oxygen Demand 15 mg/l 8 IS:3025 (P 44) (3 days at 27°C)

BDL: Below Detection Limit, DL: Detection Limit.

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### **TEST REPORT**

CUSTOMER ADDRESS, M/s. Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Water

2) Sample Marked as: STP Treated Water

3) Sample collected location: Not Specified

4) Sample Package / Quantity: PET Bottle, 1 Liter

Control No Customer Ref Date of Sample Collection Date of Sample Receipt Date of Commencement Date of Completion Date of Report

5) Sample Condition: 6) Sample Code/batch No. 7) Sample Drawn By

8) Sampling Protocol

23-09-2023 28-09-2023 29-09-2023 Satisfactory **Not Specified** 

Page 1 of 1 C-07428/2023

Purchase Order

22-09-2023

22-09-2023

Lab. Personnel IS 3025

SI. No.	Test	Unit	Result	KSPCB STP Standard	Test Method
1	pH Value		7.97	6.5 - 9.0	IS 3025: (P 11)
2	Chemical Oxygen Demand	mg/l	11	Not more than 50	IS 3025: (P 58)
3	Biochemical Oxygen Demand (3 days @27°c)	mg/l	2	Not more than 10	IS 3025: (P 44)
4	Total Suspended Solids	mg/l	BDL (DL 2)	Not More than 20	IS: 3025 (P 17)
5	Ammonical Nitrogen	mg/l	BDL (DL 0.5)	Not more than 5	IS: 3025 (P 34)
6	Total Nitrogen	mg/l	5.52	Not more than 10	IS: 3025 (P 34)

BDL: Below Detection Limit, DL: Detection Limit.

Comments: The test result meets the KSPCB limits for the tested parameters.

\*\*\*End of the Report\*\*\*

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ISO-14001 ISO-45001 RI91/10172

### **TEST REPORT**

CUSTOMER ADDRESS, M/s Jubilant Pharmova Limited. KIADB, Industrial area, Nanjangud-571302,

1) Sample description: Water

2) Sample Marked as: STP Treated Water

Sample collected location: Not Specified
 Sample Package / Quantity: Sterilized Bottle/250 ml

5) Sample condition: Normal

Page 1 of 1 Control No B-07428/2023 Customer Ref Purchase Order Date of Sample Collection Date of Sample Receipt 22-09-2023 22-09-2023 Date of Commencement 23-09-2023 Date of Completion 25-09-2023 Date of Report 29-09-2023 Satisfactory 6) Sample condition: Sample Code/batch No.

8) Sampled Drawn By

9) Sampling Protocol

Not Specified Lab. Personnel

IS 1622

77.0				
Test	Unit	Result	KSPCB Limit	Test Method
Feacal Coliforms	MPN/100ml	<1	<100	IS 1622:1981

Comments: The test result meets the KSPCB limits

\*\*\*End of the Report\*\*\*

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# NOISE MONITORING REPORT (DAY)

SL							William Commence and Commence a
No.	Date	Time (hrs)	Duration	Location	Sound Par	Sound Parameters in dB(A)	dB(A)
			(min)		Leg	LMin	LMax
$\vdash$	19/09/23	10:00:00 to 10:30:00	30.0	At Raw & Fire water storage area - N	63.1	60.5	71.5
2	19/09/23	10:45:00 to 11:15:00	30.0	At Vehicle parking area-NE	64.2	61.1	72.1
3	19/09/23	11:30:00 to 12:00:00	30.0	Main Gate entrance - E	8.09	57.9	73.5
4	19/09/23	12:25:00 to 12:50:00	30.0	In front of Passari Spinning Mill - SE	62.3	60.1	69.1
5	19/09/23	13:30:00 to 14:00:00	30.0	In Open place - S	61.0	58.2	66.7
9	19/09/23	15:00:00 to 15:30:00	30.0	In Open place - SW	58.8	57.2	65.8
7	19/09/23	15:40:00 to 16:10:00	30.0	At Solar Evaporation pond - W	63.0	61.9	69.7
8	19/09/23	16:20:00 to 16:50:00	30.0	Near Incinerator - NW	60.4	50.2	61.3

Equipment SL No.: SE4021S10784, Calibration Date: 15-Sep-2023, Calibration Due Date: 14-Sep-2024

Monitored By: Am B

(NANJANGUD

Checked By: ( ) ( ) ( ) ( )

Approved By:

20/01/23



# NOISE MONITORING REPORT (Night)

SF							
No.	Date	Time (hrs)	Duration	Location	Sound Par	Sound Parameters in dB(A)	dB(A)
			(min)		Led	LMin	LMax
Н	20/09/23	23:15:00 to 23:45:00	30.0	At Raw & Fire water storage area - N	58.0	50.6	68.5
7	20/09/23	23:55:00 to 00:25:00	30.0	At Vehicle parking area-NE	55.3	50.5	61.8
m	20/09/23	00:40:00 to 01:15:00	30.0	Main Gate entrance - E	60.3	55.2	6.99
4	20/09/23	01:30:00 to 02:00:00	30.0	In front of Passari Spinning Mill - SE	52.0	50.9	60.2
2	20/09/23	02:15:00 to 02:45:00	30.0	In Open place - S	50.6	47.8	0.99
9	20/09/23	03:15:00 to 03:45:00	30.0	In Open place - SW	53.4	45.8	62.0
7	20/09/23	04:05:00 to 04:35:00	30.0	At Solar Evaporation pond - W	53.4	46.3	60.3
8	20/09/23	04:45:00 to 05:15:00	30.0	Near Incinerator - NW	52.5	50.5	61.5

Equipment SL No.: SE4021S10784, Calibration Date: 15-Sep-2023, Calibration Due Date: 14-Sep-2024

Monitored By: Av. 09183

NANJANGUD

Checked By:

Approved By:

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