Environment Clearance Compliance Report

(F No. IA-J-11011/350/2018-IA- II(i) dated 17.06.2021)

Six monthly compliance

(For period October-2022 to March, 2023)



Prepared by

LANXESS INDIA PRIVATE LIMITED

Birlagram, Nagda Junction

District Ujjain - 456331 (M.P) INDIA

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LANXESS India Private Limited, Nagda

INTRODUCTION AND PROJECT DESCRIPTION

Six monthly environmental compliance/status report is submitted for LANXESS India Private Limited, Nagda for December 2022. The LANXESS India Private Limited is located at Nagda, Dist. Ujjain Madhya Pradesh. The Environment Clearance was obtained from Ministry of Environment & Forests (MoEFCC) wide letter no.: F No. IA-J-11011/350/2018-IA- II(i) dated 17.06.2021.

Specific and general conditions stipulated in Environment Clearance are being complied during construction and post construction phases. Environmental mitigation measures described in Environmental Management Plan are being implemented operation phase.

LANXESS India Private Limited is fully conscious about Environmental Management and enhancing green belt development at site and in surrounding area. Six monthly compliance/status report for conditions stipulated in the Environmental Clearance letter issued by MoEF are as under. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

Prepared By: Sunil Shah – HSE Head

Approved By: Pankaj Choudhary – AGM Production & Utility

<u>Chapter-1: COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE</u>

Terms and Conditions:

Conditi	Terms and Conditions	Compliance status				
on No.	The environmental clearance granted to the	Noted The site will obtained necessary				
10	The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 its amendments. It does not tantamount/construe to approval/consent/ permissions etc., required to be obtained or standard / conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtained necessary	Noted, The site will obtained necessary permission from the state pollution control board as per the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as applicable prior to construction and operation of the project. The site has got Consent to established on 10.12.2021, No.#- CTE-54820 for Expansion of following projects and CTO No. AWH-55473				
	permission as mandate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution)	granted by state pollution control board dated on 24.03.2022.				
	Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.	Product/ Existing Additional Total project permitted capacity capacity after expansion				
		Cinnamic 3000 MTPA 3000 MTPA 6000 MTPA Aldehyde Benzyl 7200 MTPA 2800 MTPA 10000				
		Benzyl				
11	The company shall comply with the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	All the environmental protection measures and safeguards proposed in the EIA/ EMP shall be implemented appropriately and maintained. This cover following actions. 1. Regular monitoring of air, water, Noise, soil and Ecology. 2. Regular meeting of Environment Management Cell. Last meeting was held on 29.12.2022. 3. Monitoring of Air pollution control measures. 4. Effort to reduce water consumption. 5. Provision of rain water harvesting. One pit has been installed in nearby Mahetwas village in April,22 6. Further rain water harvesting system are being installed in following villages:				

	 Umarna, Umarani, Junna Nagda and Takrawda. To maintained Zero liquid discharge. Reuse of waste water after treatment. Effective operation of waste water treatment facilities like ETP, STP, PTRO, Evaporator. Green cover has been increase by planting more trees. 10,000 nos. of trees have been planted in 2022. Compliance of Environment Monitoring
	Program has been attached in Chapter-2. Air and Water monitoring sample reports have been attached as Annexure-1
This Environmental clearance is granted subject to outcome of Hon'ble High Court, Hon'ble NGT and any other Court of law, if any, as may be applicable to this project.	Noted.
As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharge outside the premises. Treated Effluent shall be reused in	The site is maintained "Zero liquid discharge" status. Treated Effluent shall be reused in the process/utilities.
the process/utilities. Treated industrial effluent shall not be used for gardening/greenbelt development / horticulture.	No treated effluent shall be use for gardening/greenbelt development / horticulture.
Continuous online (24X7) monitoring system for stack emission shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be	Continuous online (24X7) monitoring system for stack emission has been installed for flue gas discharge of Incinerator stack.
transmitted to the CPCB and SPCB server.	Erection work of additional stack monitoring system for Co-gen and HCL stack have been completed. It shall be commissioned and connect with CPCB and MPPCB server after successful testing and calibration.
For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meter in the channel / drain carrying effluent within the premises.	PTZ camera with 5X pixels has been provided in the ETP plant. However, the site is Zero Liquid Discharge and no treated water is going outside of the factory.

CEMS as Incinerator stack:



The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

Occupational health center for surveillances of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers and employees shall be provided with required safety kits/masks for personal protection.

CEMS as Incinerator stack:



Hazardous material quantity and days of storage are as per Annexure-2.

- The fully equipped Occupational health center of surveillances of the worker's health has been already set up and functioning.
- The health data of medical surveillances program are being used for deploying duties of the workers.
- Appropriate personal protective equipments are provided to all the workers for safe working.
- Relevant photographs of on-line monitoring system, OHC, Details of safety kits are attached below.
- Medical reports and health data of workers have been attached as per Annexure-3

Photo graphs of OHC at site



Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.



- Safety trainings are being provided to all the employees to educate them about health and safety aspects of chemical handling.
- Practical and visual training modules are being used for training for effective communication.
- Following types of safety trainings are being given to the employees and contract workmen also.
 - ➤ Detailed training for Safe operation to all the operators and technicians.
 - Safe material handling and handling of hazardous chemicals.
 - > Use of personal protective equipments
 - Basic fire fighting
 - Types of hazard and controlling On-site emergency.
 - Work place hazard and Job Safety

Total 94 nos. of training sessions have been conducted from Sept to Dec, 2022.

Total 4723 nos. of man-hours spend for safety training for company employees and contract workmen.

Photographs of Fire and Safety training at site:



The unit shall make the arrangement for protection of possible fire hazardous during manufacturing process in material handling. Fire-fighting system shall be as per the norms.



In order to control fire emergency the site has made following arrangement. It is meeting local firefighting norms.

- Fire NOC has been taken from Directorate of Urban administration and development, Bhopal, Madhya Pradesh. Annexure-4
- Fire water storage capacity 1500 KL made available.
- Two fire tender with foam and fire water spraying facility are available at site.
- Fire pumping station with electrical and diesel operated fire engine is available to keep pressurized fire hydrant system continuously at site.
- Appropriate trained fire fighters and qualified firemen are available at site 24/7.
- Fire extinguishers have been provided at conspicuous place in adequate numbers as per MP Factory rules.
- All the storage tanks and reactors containing highly flammable liquids have been covered with automatic fire water sprinkler system.
- Coal and finished product storage area have been covered with automatic fire water sprinkler system.

- All the process equipment and storage tanks handling flammable liquids are earthed to dissipate static charge.
- Lighting arrestors system have been provided to all the building and storage area.
- Fire alarm system and manual call point system have been provided in the plant.

Relevant photos of firefighting system and fire crew:









Solvent management shall be carried out as follows:

- A) Reactor shall be connected to chilled brine condenser system.
- B) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
- C) Solvent shall be stored in a separate space specified with all safety measures.
- A) All the reactors and storage have chilled or cooling water circulation system.
- B) All the reactors and solvent handling pumps are installed with mechanical seal to prevent leakages.

- D) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- E) Entire plant shall be flam proof. The solvent storage tanks shall be provided with breather valves to prevent losses.
- F) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- C) Flammable liquids are being stored at separate space with all required safety measures.
- D) Proper earthing has been provided to all the electrical equipments and flammable liquid handling equipments.
- E) Flame proof electrical installation have been provided to all the plant and storage area as per hazard area classification. Breather valves are provided to the storage tanks containing flammable liquid.
- F) Toluene storage tanks are connected with vent condensers with chilled brine circulation.

P.O copy Flame proof equipment has been attached as Annexure-5

Flame proof equipments in plant



Volatile organic compounds (VOCs) Fugitive emissions shall be controlled at 99.99% with effective chillers/ modern technology.

As proposed water requirement for industrial use shall be met from STP treated domestic wastewater from local areas and steam condensate water from steam. Drinking water requirement shall be met through external fresh water suppliers.

Lightening arrestors at site



Appropriate measures have been taken to control VOCs at maximum level by providing effective chillers and modern technology to each process and storage.

Proposed water requirement shall be met from STP and steam condensate.

- Supply of drinking water is accomplished from external agency. Copy of invoice has been attached as Annexure-6.

STP plant at site is already working since 2009



Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial process in the unit. No recharge shall be permitted within the premises. Process effluent / any wastewater shall not be allowed to mix with storm water.

Rain water harvesting system have been provided for Canteen building by collecting rain water of roof top in storage tank. The harvested water shall be use for process.

We are not recharging storm water at site and we shall in future also that no recharge will be done within site.

We shall ensure that no process effluent and waste water mixed with storm water.

Additionally LANXESS, Nagda has installed rain water harvesting system in our open land at Mahetwas away from plant premises to improve ground water table.

Rain water collection at contractor shed at site



Rain water harvesting pit at open land in Mahetwas village





The company shall under take waste minimization measures as below :

- A. Metering and control of quantities of active ingredients to minimize waste;
- B. Reuse of bi-products from the process as raw material substitutes in other process.
- C. Use of automated filling to minimize spillage.

Following waste minimization measures shall be ensured.

- A. Metering and control of quantities of active ingredients to minimize waste;
- B. Reuse of bi-products from the process as raw material substitutes in other process. List of by-products and use are as per attached Annexure-7.

- D. Use of Close Feed system into batch reactors.
- E. Venting equipment through vapor recovery system.
- F. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- C. Use of automated filling to minimize spillage.
- D. Use of Close Feed system into batch reactors.
- E. Venting equipment through vapor recovery system.
- F. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

Automated filling machine to minimize spillage



Chilled water condenser for Toluene storage



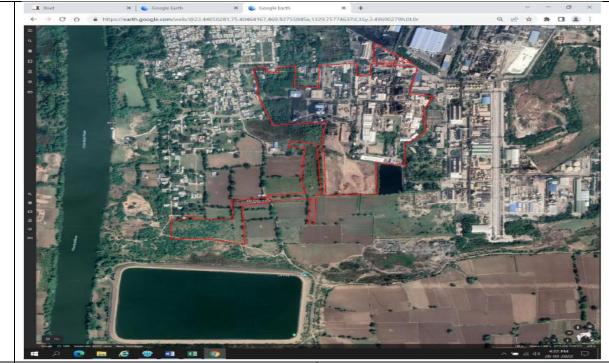
The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery/ adjacent areas. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Record of tree canopy shall be monitored through remote sensing map. Tree have to be planted with spacing 2m X 2m and number of trees have to be increased accordingly. The plant species can be selected that will give better carbon sequestration. All tree must be planted with in first year.

Total area of site is 23.468 Hectare.

A total of 8.83 ha (37.63%) of the plot area has been marked for tree plantation within the plant.

- Green belt has been developed as per proposed plan submitted in EIA report as per Anneuxure-8. Further tree plantation process is in progress as per plan submitted to MOEF.
- More than 10,000 trees have been planted as on today at the site.
- Nearly 33% of total project area shall be covered with tree plantation.
- The plant species have been selected so that it will give better carbon sequestration.

Photos of green belt at site from Google earth



The activities and the action plan proposed by the project proponent to address the socioeconomic /public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.

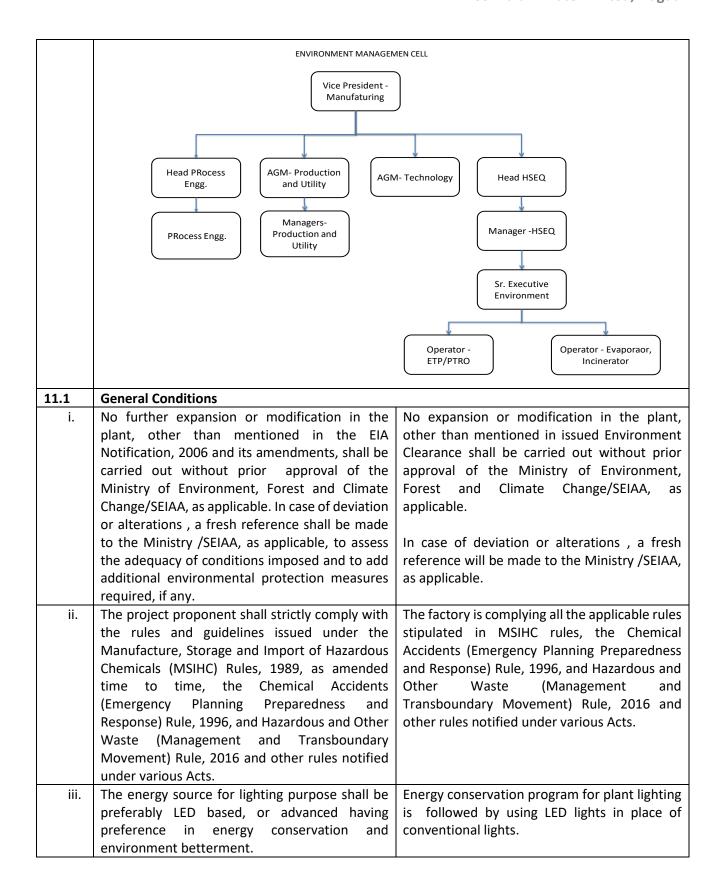
A separate Environmental Management Cell (having qualified person with Environment Science /Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facility shall be set up to carry out the Environmental Management and Monitoring functions.

The action plan proposed for Socio-economic and public hearing issues shall be completed as per the schedule.

Public hearing point wise compliance status has been attached as per <u>Annexure-9</u>

A separate Environmental Management Cell chaired by Vice President – Manufacturing are already set up. Quarterly meeting is being held to discuss and prepare action plan for improving environment management programs.

Organogram for Env. management cell is mentioned below.



		Total fitting changes in recent past = 1050 nos. Total annual savings in KW = 320777 KWH
iv.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall confirm to the standard prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75dBA (Day time) and 70dBA (Night time).	An effective engineering controls are taken to minimize noise level and to ensure ambient noise level standard.
V.	The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. The activities shall be under taken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	The LANXESS has already taken many CSR project to improve socio-economic environment and welfare in surrounding area. Brief list of CSR with expenditure incur is as per Annexure-10. The LANXESS has joined hands in public health study of surrounding villages in collaboration with surrounding industries. The study was carried out by M/s. NIREH, Bhopal. Medical examination of people in nearby Villages(2021) The company will also undertake further relevant measures to improve the socioeconomic conditions and ecodevelopmental measures including community welfare measures in the project area for the overall improvement of the environment of the surrounding area through CSR or CER.
vi.	The company shall earmarked sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measure shall not be diverted for any other purpose.	Noted and shall be followed. We have earmarked the fund for environment management/ pollution control measure for the year 2022 and it shall not be diverted for any other purpose. EMP (Zero liquid discharge facility like Post treatment reverse osmosis, Evaporator and Liquid waste incinerator) installation cost is approximately 55 Crores. EMP recurring expenditure to operate Zero liquid discharge facilities like STP, ETP, PTRO I &

		II and Evaporator was ₹ 7.35 Cr. in the year 2022.
vii.	A copy of clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal.	A communication letters have been already send to Panchayat, Zilla Parishad / Municipal Corporation and Urban local body.
viii.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB, A copy of Environmental clearance and six monthly compliance status report shall be posted on the website of the company.	Interim compliance report has been submitted to SPCB and CPCB dated on 16/08/2021. Six monthly compliance report shall be submitted including results of monitored data to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB.
ix.	The Environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concerned state Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of the compliances of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by email.	The Environmental statement for each financial year ending 31 st March in Form-V as is being submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986. We shall send Environmental statement – Form-V – Every year to MOEF on official email ID. Form-V has been attached as per Annexure-11.
x.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/ . This shall be advertised within seven days from the data of issues of the clearance letter, at least in two local newspapers that are widely circulated in the region on which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	An advertisement was published in local newspaper. Copy of advertisement has been attached as Annexure-12
xi.	The project authorities shall inform the Regional Offices as well as the Ministry, the date of financial closure and final approval of the project	Since fund is arranged from internal resource, Information about financial closure not required/ applicable.

	by the concerned authorities and the date of	No construction required, only capacity
	start of the project.	enhancement, so no date of start of project is
		also not required.
xii.	This Environmental clearance is granted subject	The site is agreed to comply.
	to final outcome of Hon'ble Supreme Court of	
	India, Hon'ble High Court, Hon'ble NGT and any	
	other Court of Law, if any, as may be applicable	
	to this project.	
12	The Ministry serve the right to stipulate	Noted.
	additional conditions, if found necessary at	
	subsequent stages and the project proponent	
	shall implement all the said condition in a time	
	bound manner. The Ministry may revoke or	
	suspend the environmental clearance, if	
	implementation of any of the above conditions is	
	not found satisfactory.	
13	Concealing factual data or submission of false	Noted.
	/fabricated data and failure to comply with any	
	of the condition mentioned above may result in	
	withdrawal of this clearance and attract action	
	under the provisions of the Environment	
	(Protection)Act, 1986.	
14	Any appeal against this environmental clearance	Noted.
	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.	
15	The above conditions shall be enforced, Inter-	Noted. Copy of CTO cum consolidated Air and
	alia under the provision of the Water	water consent along with hazardous Waste
	(Prevention & Control of Pollution) Act, 1974,	authorization and PLI copy to be attached as
	the Air (Prevention & Control of Pollution) Act,	Annexure-13.
	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.	

Additional Information:

- Noise monitoring report Annexure 14
- Photographs of Environment Lab Annexure- 15

Chapter-2 Compliance of Environment Monitoring Program

Aspect	Parameter	Location	Monitoring & Frequency	Compliance action	Compliance status
Ambient Air Quality and work zone air quality	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ , CO & HC	One Work Zone and one nearby location	Twice in 6 months	Ambient air quality monitoring station has been installed at site. Ambient air quality and work zone air quality monitoring was done by M/s. AZIZ Lab, Pithampur (NABL certified Lab)	Complied (Sample report attached)
Process Stack	SO ₂ , HCl, Mist, Cl ₂ & VOC	2 Stacks	Twice in 6 months	On-line monitoring system has been installed on each process stack. Last manual Process stack monitoring was done in Co-gen plant in March /2023 by M/s. AZIZ Lab, Pithampur (NABL certified Lab)	Complied (Sample report attached)
Ground Water Quality	Physical, chemical and biological parameters including heavy metals	2 locations near to project site	Four times a year	Ground water analysis has been carried out in September, 2022.	Complied (Sample report attached)
Noise Level	Noise	Two locations including one in project site and other one in nearby locations	Twice in 6 months.	Noise monitoring is carried out at site and near by locations.	Complied. Data have been attached.
Soil	Physical and chemical parameters with organic content	Two location near to waste storage area	Four times a year	Soil water analysis has been carried out in September, 2022.	Complied (Sample report attached)

Ambient air quality monitoring



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

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Test Report

Report No.

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EN-20221712009

							27/12/2022		
	eport issued by	Azis Labs,	Plot No. M-43	, Sector-3, Pit	thampur 454	774, Di	st. Dhar, (M.P	.) India	1
2. R	eport issued to (Name &	Address)	Company of the last of the las	3. Sample	forwarding	letter 1	No. &Date		
Adv. Birla	xess India Pvt. Ltd. ance Industrial Intermedia agram, Nagda-456331 hya Pradesh, India	ates (AII)							
	4. Sample	Name		5. Sample	received da	ite	6. Samp	le Con	dition
	Ambient Air N				12/2022			Good	
	7. Sampling done by	8. Sar	npling Date	9. Sampl	ing Locatio	n 1	0. Sampling Time		Sampling Duration
	AzisLabs		/12/2022		NA		NA		24 Hrs.
991	12. Ambient Te				ive Humidit	у	14. Win		
	26°C			-	38%		From North V	Vest to	South East
	Analysis Start Date	17/12/2	022	16. Analys	is End Date	27	7/12/2022		
0000	Chemical & Physical Par	ameters		Resu	l+	1000			10000
Sr. No.	Test Parameter	Unit	Administrati on Office	Gulmohar	Stores	Coa	T- 2000 000 000 000 000 000 000 000 000 0	ation	Test Method
1.	Sampling Time	HR:MM	11:15	11:35	12:20	12:4			
2.	Particulate matter (less than 10µm) or PM 10	μg/m³	28.44	29.73	28.41	27.8	4 Max.1	Max.100	
3.	Particulate matter (less than 2.5µm) or PM 2.5	μg/m³	24.57	24.65	24.73	24.8	24.81 Max. 60		
4.	Sulphur Dioxide (SO ₂)	μg/m³	17.39	18.44	17.31	18.7	3 Max. 1	80	
5.	Nitrogen Dioxide (NO ₂)	μg/m³	24.44	27.26	26.44	25.8	2 Max. 8	80	IS:5182
6.	Carbon monoxide (CO)	mg/m³	564	604	612	655	Max. 20	000	APHA Methods
7,	Lead as Pb	μg/m³	ND	ND	ND	ND	Max. 1	.0	(Third
8.	NH ₃	μg/m³	1.81	0.88	1.04	1.18	3 Max.4	00	Edition)
9.	Ozone	μg/m³	ND	ND	ND	NE			
10.	Benzene	μg/m³	ND	ND	ND	NE		30.00	
11.	Benzo(a)Pyrene	ng/m³	ND	ND	ND	ND			
12.	Arsenic	ng/m³	ND	ND	ND	ND	A Transferred		
13.	Nickel	ng/m³	ND	ND	ND	NE		-	
Note			7. 5250	140	1417	TAL	IvidA.		

- 1. The legal liabilities are limited up to the analytical charges only.
 2. The results are related only to the sample tested.
 3. This report shall not be reproduced without the written approval of Azis Labs.
- 4. ND Refers to Not detected

5. Instruments used details: PM10 -(AZ/LAB/151), PM2.5 -(AZ/LAB/064), CO Analyzer -(AZ/LAB/136)

Checked by

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

Stack Monitoring



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

Test Report

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					Report No.	E	N-20221	712011	
					Report Issue		7/12/202	100	
1. R	eport issued by Az	zis Labs, Plo	t No. M-43	Sector-	3, Pithampur 454	774, Dist. I	Dhar, (M.	P.) India	
	eport issued to (Nam	ie & Addre	ss)	3. Samp	ple forwarding l	etter No. &	Date		
Adv Birla	kess India Pvt. Ltd. ance Industrial Interm agram, Nagda-456331 hya Pradesh, India		I)						
	4. Sample	Name		5. Sam	ple received dat	e	6. Sampl	e Condition	
	Stack /	Air			17/12/2022			Good	
7.	Sampling done by	8. Sampl	ing Date	9. San	npling Location	The second second	mpling me	11. Sampling Duration	
	Azis Labs	16/12	/2022		Incinerator	12:5:	5 Hrs.	60 Min.	
12.	Stack attached to	13. Stac	k height	1	4. Diameter		mbient erature	16. Wind direction	
	Incinerator	321	32Mtr		0.6Mtr	28	°C	From West to East	
17. Fuel 18. Flue gas			erature 1		19. Flue g	as veloci	ty		
			NA		NA				
20. /	Analysis Start Date	17/12/202	2		21. Analysis End Date		2	27/12/2022	
	Chemical & Physical		'S						
Sr. No.	Test Param	eter	Unit		Result	Specificati	on	Test Method	
01.	Temperature of Emi		°C		155	NA		STRACE	
02.	Barometric Pressure		Mm of	Hg	779	NA			
03.	Velocity of Gas		m/se	c	9.10	NA			
04.	Quantity of Gas Flo	57.	Nm ³ /l	hr	3423.41	NA			
05.	. Concentration of Carbon Dioxide		% v/	v	2.5	NA			
06.	Concentration of Carbon Monoxide		% v/	v	1.72	NA		IS:11255, APHA Methods (Third	
07. Concentration of Oxygen		% v/	v	2.40	NA		Edition) &		
08.	Concentration of Pa Matter (PM)	rticulate	mg/Ni	m³	20.15	Max 50		IS:5182 Method	
	Littatice (1 IVI)								
09.	Hydrochloride (HC)	L)	mg/Nr	n³	8.62	Max 50			

Checked by

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



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11.	Carbon Monoxide (CO)	mg/Nm ³	48.50	Max 100	
12.	Total Organic Carbon (TOC)	mg/Nm³	2.79	Max 20	
13.	Oxides of Nitrogen (NOx)	mg/Nm ³	101.40	Max 400	
14.	Sulphur Dioxide (SO ₂)	mg/Nm ³	28.15	Max 200	
15.	Total Dioxins and Furans	ngTEQ/Nm3	Not Detected	Max 0.1	
16.	Sb	ngTEQ/Nm3	Not Detected	Max 1.5	
17.	As	ngTEQ/Nm3	Not Detected	Max 1.5	
18.	Pb	ngTEQ/Nm3	Not Detected	Max 1.5	
19.	Cr	ngTEQ/Nm3	Not Detected	Max 1.5	IS:11255, APHA
20.	Co	ngTEQ/Nm3	Not Detected	Max 1.5	Methods (Third
21.	Cu	ngTEQ/Nm3	Not Detected	Max 1.5	Edition) &
22.	Mn	ngTEQ/Nm3	Not Detected	Max 1.5	IS:5182 Method
23.	Ni	ngTEQ/Nm3	Not Detected	Max 1.5	
24.	v	ngTEQ/Nm3	Not Detected	Max 1.5	
25.	Cd	ngTEQ/Nm3	Not Detected	Max 1.5	
26.	Th	ngTEQ/Nm3	Not Detected	Max 1.5	1
27.	Hg and their compounds	ngTEQ/Nm3	Not Detected	Max 1.5	

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- The results are related only to the sample tested.
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- 4. Instruments used details: Stack kit -(AZ/LAB/082)

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Ground Water analysis report



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Test Report

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Page 1 of 1

				Report No.		EN-2022	20916009		
				Report Issu	e Date	26/09/20)22		
1. Repor	t issued by A2	ris Labs, Plot	No. M-43, Sector	r-3, Pithampur 45	4774, Dis	t. Dhar, (I	M.P.) India		
2. Repor	t issued to (Nam	e & Address	Name of	the manufacture	r	Mf	g. Lic. No.		
Lanxess India Pvt. Ltd. Advance Industrial Intermediates (AII)Birlagram, Nagda-456331 Madhya Pradesh, India			NA		NA				
3. Samp	le forwarding le	tter no. & da	te 4. Samp	le received Date	5.	Sample 6	Quantity Received		
· ·	15/09/202	2	1	6/09/2022		1	x 5 Liter		
Present Au	6. Sample Na	ame	7. San	ple Condition	8.1	Packing	9. Sealed/Unsealed		
	Underground V	Water		Good	Plas	stic Cane	Unsealed		
10. Sampling done by			11. S	11. Sampling Date			12. Sampling Method		
	Azis Labs			15/09/2022			IS Method		
13. Deta	ils of sample as	obtained from	manufacturer						
Manuf	Original acturer Name e of Product)	B, Batch N		C. Batch Size as represented by the sample		Date of Mfg.	E. Date of Exp.		
(in en	NA	NA		NA			NA		
14. Anal	ysis Start Date	16/09/2022		15. Analysis Er			26/09/2022		
	nical & Physical	Parameters	ela Aliquina del						
Sr. No.	Test Para	meter	Unit	Result	Specific	ation	Test Method		
01.	Colour		Hazen	7.71	N/				
02.	Odour			Agreeable	Agree				
03.	Chloride as Cl		mg/l	455	N.A				
04.	Fluoride as F		mg/l	Not Detected	N/		Manual of Ministry of		
05.	Total Hardness	as CaCO3	mg/l	248	N.A		Agriculture, Govt. of		
06.	Turbidity -		NTU	4	N.A		India, January 2011		
07.	Free Residual C	hlorine	mg/l	Not Detected	N.A		more, surrous y 2011		
08.	Iron as Fe		mg/l	2.8	N.A				
09.	E. Coli		MPN/100ml	Absent	N.A				
10.	Coliform		MPN/100ml	Absent	N/				

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- 2. The results are related only to the sample tested.
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Soil Monitoring



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Test Report

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			Re	eport No.	EN-20220916	023	
5	- 25			port Issue Date	27/09/2022		
		zis Labs, Plot No. I			74, Dist. Dhar, (M.P.) India	
	rt issued to (Nan	ne & Address)	Name of the	e manufacturer	Mfg. Lic. No.		
Lanxess India Pvt. Ltd. Advance Industrial Intermediates (AII) Birlagram, Nagda-456331 Madhya Pradesh, India			Value of	NA	NA		
3. Samp	ole forwarding le	tter no. & date	4. Sample r	eceived Date	5. Sample Qu	antity Received	
15/09/20	022		16/09/2022		1 Kg (Approx	.)	
6. Samp	ole Name		7. Sample C	Condition	8. Packing	9. Sealed/Unsealed	
Soil San	nple		Good		Polybag	Unsealed	
10. Sam	pling done by		11. Samplin	g Date	12. Sampling	Method	
Azis Lal	bs	No. of China	15/09/2022		NA		
13. Deta	ails of sample as	obtained from ma	nufacturer				
A. Original B. Batch No. Manufacturer Name (in case of Product)		C. Batch Size as represented by the sample		D. Date of Mfg.	E. Date of Exp.		
NA.		NA	NA		NA	NA	
14. Ana	lysis Start Date	16/09/2022		15. Analysis Er	nd Date	27/09/2022	
16. Che	mical & Physical	Parameters					
Sr. No.		arameter	Unit	Result	Specification	Test Method	
01.	pH at 30°C			7.20			
02.	Electric Conduc	tance		412	-		
03.	Texture			Slit, Clay, Loam	-		
04.	Sulphates as SC)4	%	10.94		American Public	
05.	Copper as Cu		ppm	ND		Health Association	
06.	Zinc as Zn		ppm	ND		(APHA 2017),	
07.	Maximum Dry Density		W/v	2.25	-	Ed. 23rd	
08.			%	27			
09.	Organic Conten	t	%	0.70			
10.	Water Holding		%	38			

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 *Food & Agriculture Products Testing, *Method Development & Validation (Pharma, Food & Environment).

^{*}API Product (Process Development & Research), GMP/GLP Solution for Pharma / Food Industry



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11.	Total Nitrogen as N	ppm	24		
12.	Potassium as K	ppm	28		
13.	Sulphur as S	ppm	NIL		
14.	Molybdenum as Mo	ppm	ND	**	
15.	Aluminium	ppm	ND	**	American Public
16.	Boron as B	ppm	ND		Health Association
17.	Calcium as Ca	ppm	62	-	(APHA 2017),
18.	Magnesium as Mg	ppm	24		Ed. 23rd
19.	Phosphorus as Ph ₄ "	ppm	34	77	
20.	Cation Exchange Capacity as CEC	Meq/ 100ml	13.28	-	

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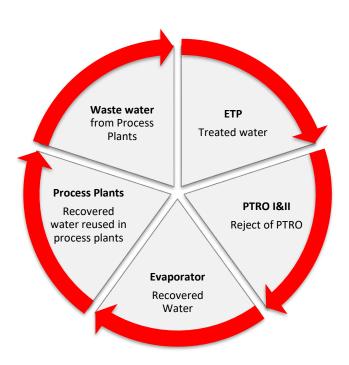
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Chapter-3 ZLD process

Zero Liquid Discharge- Process

The effluents generated from the existing operations are treated in an ETP of capacity 300 KLD and 2 numbers of Post Treatment Reverse Osmosis plant (480+420 KLD) with evaporator. LIPL have maintained Zero Liquid Discharge status from 2012 after installation of Post Treatment Reverse Osmosis (PTRO) and MVRE (Mechanical recompression of vapors from Evaporator). Treated effluent from Effluent Treatment Plant is send to PTRO for further treatment and reject of PTRO is sent to MVRE for removal of salt and recover water. Recovered water is reused in process. Photographs of ETP, STP, PTRO and MVRE are shown in **Figure below**.

ZLD Process



Facility	Design capacity
Effluent Treatment plant	300 KLD
Post treatment Reverse Osmosis	480+420 KLD
Evaporator	260 KLD

1. ETP

- Collect process effluent from all the production plants taken in effluent collection tank .
- Oil and grease remove manually in drums regularly through mug to scup.
- Oil free effluent then transfer to the Equalization tank. The neutralization tank is provided for neutralizing the Effluent .
- An agitator and online pH indicator with control valve is provide for effective mixing in neutralization tank and maintain pH between 7.0 to 7.5.
- Collect pH maintained effluent in gravity in Buffer tank.
- FTYGT mixer is provided for mixing and pre-aeration purpose in buffer tank .
- By Pump the effluent go to primary clarifier tank at constant uniform flow
- Poly Aluminum Chloride (PAC) solution to dose at effluent transfer pump suction line.
- POLY solution to dose at effluent transfer to pump discharge line.
- Collect POLY and PAC dose Effluent in primary Clarifier
- Primary Clarifier with mechanism is provide to remove the suspended solids from the system. Flocculent dosing system PAC and POLY solution is provided to enhance the solid settling process.
- Due to PAC & POLY dosing, solid liquid separation is enhanced and sludge settles at the bottom of the primary clarifier tank
- The supernatant Effluent over flowers to the aeration tank component taken in(C-4-A)
- Transfer the sludge to hopper by pump bottom of primary clarifier.
- Taken Supernatant water in Aeriation tank for secondary treatment
- Nitrogen and phosphorous supplemented by addition of UREA and D.A.P.
- The microbial culture development in the solid(MLSS)
- Primary treated effluent enters in the compartment C4A. Then the partially degraded effluent along with the biomass overflow C4B & then to C4C tank.
- Effluent along with the biomass enters by gravity secondary clarifier tank in the feed well chamber. Bio mass sludge being healthy settles at the bottom of the tank. Open bottom valve of the tank sludge recycle by the pump transfer in C4A tank
- The clear treated water effluent overflow to V-notch chamber final Clear Treated water collection tank
- ETP treated water transfer to PTRO-II by Sand filter

2. PTRO

- Old RO reject & cooling tower blow down water collect in feed tank of PTRO I
- Permeate of PTRO I go to cooling tower make up & reject go to feed tank of PTRO II.
- ETP treated effluent go to feed tank of PTRO II
- Permeate of PTRO II go to cooling tower make up & reject go to Evaporator for further treatment.

3. Evaporator

- PTRO II reject water & B2 stream from BCHO plant collect in brine feed tank.
- By pump this brine feed to reactor I. Caustic lye (48%) dosing done in reactor I for increase the Ph & removal of hardness.
- After this brine enter in reactor II, where flocculent & poly dosing done.
- Then brine enter in the clarifier.
- Clarified brine go to clarified brine storage tank & sludge from bottom go to filter press.
- In clarified storage tank ph adjust by dosing of HCl.
- Now brine go to deaerator through PHE I.
- Oxygen scavenger dosing done in deaerator.
- After this brine collect in crystallization tank.
- Then by pump, brine enter in crystallizer loop through PHE II & PHE III.
- For rising the temp of brine, steam dose in PHE III.
- Circulation pump circulate the brine slurry in loop through heat exchanger.
- At top of the loop steam has generate & this steam compressed by MVR I & MVR II.
- By MVR I & MVR II this steam enter in heat exchanger & convert in to distillate.
- This distillate collect in distillate tank & transfer for the further use through PHE I & PHE II.
- Thick slurry at the bottom of loop pump to the centrifuge pusher/centrifuge decantor.
- Salt has separate by centrifuge pusher/centrifuge decantor from slurry & mother liquor go to crystallization tank

Annexure-1 Air Monitoring report

Ambient Air Quality Summary Report - Year 2022 - 2023 (2nd Half)

Sr.							•	<u>,</u>		
No.	Parameters	Unit	Standard	Location	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
				Administration Office	41.25	53.30	58.44	51.46	44.28	50.47
					56.47	53.10	28.44	48.43	48.16	42.36
				Average	48.86	53.20	43.44	49.95	46.22	46.42
				Gulmohar	43.16	51.42	61.89	44.14	42.64	44.82
					59.64	52.10	29.73	44.65	42.65	36.25
1	Particulate Matter PM ₁₀	μg/m³	100	Average	51.40	51.76	45.81	44.40	42.64	40.53
		1 0,		Stores	48.68	52.30	64.73	52.25	49.55	52.75
					54.49	50.39	28.41	52.85	42.32	47.55
				Average	51.59	51.35	46.57	52.55	45.93	5015
				Coal Yard	52.02	72.94	56.23	60.54	60.77	58.98
					64.15	72.74	27.84	63.54	56.82	56.19
				Average	58.09	72.84	42.04	62.04	58.75	57.59
				Administration Office	20.91	24.10	28.07	22.29	25.32	26.21
					25.65	25.31	24.57	23.82	28.59	28.32
				Average	23.28	24.71	26.32	23.05	26.20	27.26
				Gulmohar	23.98	22.90	30.44	20.36	22.78	22.87
					21.64	19.48	24.65	19.22	24.25	26.14
2	Particulate Matter PM _{2.5}	μg/m³	60	Average	22.81	21.19	27.55	19.79	23.51	24.50
	2.3	1-0/		Stores	24.42	27.30	28.94	24.14	29.71	28.92
					24.99	24.39	24.73	24.53	29.41	30.58
				Average	24.71	25.85	26.84	24.33	29.56	29.75
				Coal Yard	26.46	30.67	29.63	32.28	32.78	30.44
					26.94	29.29	24.81	29.52	32.58	32.19
				Average	26.70	29.98	27.22	30.9	32.68	46.53

LANXESS India Private Limited, Nagda

					Administration Office	18.86	19.33	18.42	19.34	16.24	18.32
						23.94	20.74	17.39	19.96	18.46	22.88
					Average	21.40	20.04	17.91	19.65	17.35	20.60
					Gulmohar	19.28	18.30	19.83	16.25	15.13	16.64
						20.77	21.55	18.44	18.22	15.28	19.47
3	Sulphur Dioxide	SO ₂	μg/m³	80	Average	20.03	19.93	19.14	17.23	15.20	18.05
	•	_	1 0,		Stores	22.03	24.30	18.77	19.85	24.12	20.25
						19.93	19.44	17.31	20.47	20.78	24.23
					Average	20.98	21.87	18.04	20.16	22.30	22.24
					Coal Yard	23.46	30.12	16.14	25.28	27.28	22.58
						25.94	20.37	18.73	21.54	25.12	27.89
					Average	24.70	25.25	17.44	23.41	26.20	25.23
					Administration Office	21.84	21.41	24.32	20.67	20.19	20.47
						22.55	20.64	24.44	21.85	22.76	26.54
					Average	22.20	21.03	24.38	21.26	21.47	23.50
					Gulmohar	20.64	21.22	26.49	19.18	18.46	19.42
						23.58	21.51	27.26	20.56	21.37	22.12
4	Nitrogen Dioxide	NO ₂	μg/m³	80	Average	22.11	21.37	26.88	19.88	19.92	20.77
	J		1 0		Stores	22.82	26.21	24.88	24.82	21.64	22.36
						27.39	29.41	26.44	25.44	25.29	26.34
					Average	25.11	27.81	25.66	37.54	23.46	24.35
					Coal Yard	23.72	23.45	26.68	27.64	27.12	26.95
						26.12	21.52	25.82	29.87	27.32	28.38
					Average	24.92	22.49	26.25	28.76	27.22	27.67
					Administration Office	382	431	579	466	460	421
						361	432	564	374	464	426
5	Carbon Monoxide	со	μg/m³	2000	Average	372	432	572	420	462	423.5
	Carbon Monoxide		μο/ '''	2000	Gulmohar	302	214	594	225	298	357
						291	246	604	220	356	386
					Average	297	230	599	222.5	327	371.5

LANXESS India Private Limited, Nagda

					Stores	280	253	609	335	364	382
						289	239	612	398	305	412
					Average	285	246	611	366.5	334.5	397
					Coal Yard	329	351	668	490	512	478
						364	321	655	480	412	498
					Average	347	336	662	485	462	488
					Administration Office	ND	ND	ND	ND	ND	ND
						ND	ND	ND	ND	ND	ND
					Average	ND	ND	ND	ND	ND	ND
					Gulmohar	ND	ND	ND	ND	ND	ND
						ND	ND	ND	ND	ND	ND
6	Hydrocarbon	НС	μg/m³	5	Average	ND	ND	ND	ND	ND	ND
	11,41.004.501.		P6/	J	Stores	ND	ND	ND	ND	ND	ND
						ND	ND	ND	ND	ND	ND
					Average	ND	ND	ND	ND	ND	ND
					Coal Yard	ND	ND	ND	ND	ND	ND
						ND	ND	ND	ND	ND	ND
					Average	ND	ND	ND	ND	ND	ND

^{*}ND - Refers to Not detected.

Sample - Co-Gen stack monitoring report March-23



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					Report No.	EN-202	30304018
					Report Issue D	AND STREET, ST	Park Landau and Carlo
-					3, Pithampur 45477		M.P.) India
Lanz Adv Birla	eport issued to (Nan xess India Pvt. Ltd. ance Industrial Intern agram, Nagda-456331 lhya Pradesh, India	nediates (AII)) 3.	Samp	ole forwarding lett	er No. &Date	
	4. Sample	Name	5	. Sam	ple received date	6. San	ple Condition
	Stack Mon	itoring		COLUMN TO STATE OF THE PARTY OF	04/03/2023		Good
7.	Sampling done by	8. Samplin	g Date	9. San	npling Location	10. Samplin Time	g 11. Sampling Duration
	Azis Labs	03/03/20	023	C	Cogen Plant	11:45Hrs.	60 Min.
12.	Stack attached to	13. Stack l	height	14	1. Diameter	15. Ambien Temperatur	100 mm m m m m m m m m m m m m m m m m m
	Cogen Plant	58 Mtr	rs.		3.5 Mtrs.	26°C	From East
OH	17. Fuel	18. Flue ga	s temperati	ire		9. Fluegas velo	
			176			10.78 m/sec	Control to the Control of the Contro
	Analysis Start Date	04/03/2023			21. Analysis End I	Date	14/03/2023
	Chemical & Physical	The second second second second					
Sr. No.	Test Paran	neter	Unit		Result	Specification	Test Method
01.	Temperature of Em	ission	°C		176	NA	
02.	Barometric Pressure	9	Mm of H	Ig	756	NA	
03.	Velocity of Gas		m/sec		10.78	NA	FIET PER
04.	Quantity of gas flow	v	Nm³/hr		15897	NA	
05.	Concentration of Ca Dioxide		% v/v		3.8	NA	IS:11255 Methods
06.	Concentration of Ca Monoxide	arbon	% v/v		1.3	NA	Methods
07.	Concentration of O	xygen (O ₂)	% v/v	8	20	NA	
08.	Concentration of Pa Matter	rticulate	mg/Nm	3	39.84	Max. 50	

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09.	Hydrogen Chloride (HCL) Vapour and Mist	mg/Nm³	NIL	Max. 35	
10.	Chlorine (Cl ₂)	μg/Nm³	NIL	Max. 15	
11.	Oxides of Nitrogen (NOx)	mg/Nm³	89.75	Max. 400	IS:11255
12.	Sulphur Dioxide (SOx)	mg/Nm³	28.28	Max. 200	Methods

Note:

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2. The results are related only to the sample tested.
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4. Instruments used details: Stack Kit –(AZ/LAB/082) ,CO Analyzer –(AZ/LAB136)

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Person In-charge Testing

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Sample – Ambient air quality March-23



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				R	eport No.	I I	EN-202303	04017	
				R	eport Issue D		14/03/2023		
			Plot No. M-43,		hampur 45477			.) India	0
	eport issued to (Name &	Address)		3. Sample	forwarding le	tter No.	&Date		10 mm
Adva Birla	ess India Pvt. Ltd. ance Industrial Intermedia gram, Nagda-456331 hya Pradesh, India	ites (AII)							
	mple Name		mprompania di la	5. Sample	received date	6. Sa	mple Con	dition	
Amb	ient Air Monitoring	Tea II		04/03/2023		Good			
7. Sa	impling done by	8. Sam	oling Date	9. Samplin	g Location		ampling		mpling
		00.001.10			The state of the state of	Time		Dura	
	Labs	03/01/2	023	NA 12 D-1-45	- XX1414	11:30	OHrs Vind direc	24 Hr	S.
26°C	Ambient Temperature			44%	e Humidity		East	tion	
	Analysis Start Date	04/03/2	023	74.77.4	is End Date	1000000	3/2023		
	Chemical & Physical Par	A STATE OF THE PARTY OF THE PAR	023	10. Analys	is End Date	114/0.	7,2023	contra l	
	nemical & Luysical Lai	ameter 3		Resu	lt		100 100	man d	Test
Sr. No.	Test Parameter	Unit	Administrati on Office	Gulmohar	Stores	Coal Yard	Specific	ation	Method
1.	Sampling Time	HR:MM	11:30	11:55	12:25	12:50	NA.		
2.	Particulate matter (less than 10µm) or PM 10	μg/m³	50.47	44.82	52.75	58.98	Max.	100	
3.	Particulate matter (less than 2.5µm) or PM 2.5	μg/m³	26.21	22.87	28.92	30.44	Max.	60	
4.	Sulphur Dioxide (SO ₂)	μg/m³	18.32	16.64	20.25	22.58	Max.	80	
5.	Nitrogen Dioxide (NO ₂)	μg/m³	20.47	19.42	22.36	26.95	Max.	80	IS:5182
6.	Carbon monoxide (CO)	mg/m³	421	357	382	478	Max. 2	000	APHA
7.	Lead as Pb	μg/m³	ND	ND	ND	ND	Max.	1.0	(Third Edition
8.	NH ₃	μg/m³	0.19	0.15	0.35	0.48	Max.4	100	Lumon
9.	Ozone	μg/m³	ND	ND	ND	ND	Max.	100	
10.	Benzene	μg/m³	ND	ND	ND	ND	Max.	05	
11.	Benzo(a)Pyrene	ng/m³	ND	ND	ND	ND	Max.	01	
12.	Arsenic	ng/m³	ND	ND	ND	ND	Max.	06	
13.	Nickel	ng/m³	ND	ND	ND	ND	Max.		
15.	INICKEI	ng/m	ND	ND	ND	ND	Max.	20	

- 1. The legal liabilities are limited up to the analytical charges only.
- The results are related only to the sample tested.
 This report shall not be reproduced without the written approval of Azis Labs.
- 4. ND Refers to Not detected
- Instruments used details: PM10 (AZ/LAB/151), PM2.5- (AZ/LAB/152), CO Analyzer (AZ/LAB/136)

Checked by

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

Annexure-2: Raw material storage with days quantity:

Raw Material	Maximum Storage Capacity	stored normally	Unit	Days of storage
Toluene Nitration Grade	1740	1392	MT	10
Liquid Chlorine	Nil	Nil	MT	Chlorine supplied via pipe line from neighbouring industry
Azo-bis-isobutyronitrile (AZDN)	2	2	MT	30
Caprolactum	5	5	MT	80
Benzyl Chloride	158	140	MT	1.0
D-Benzyl Ether (Captive Generation)	18	16	MT	2
Sodium Benzoate (Captive Generation)	50	In plant	MT	10
Benzal Chloride (Captive Generation)	75	In plant	MT	1
Benzaldehyde	195	183	MT	4.0
CINNAMIC ALDEHYDE	38	38	MT	3.0
Sodium Acetate (Tri-hydrate)	120	120	MT	8
Tetera Butyl Ammonium Bromide -(TBAB)	5	5	MT	30
Boric Acid	10	10	MT	30
Acetic Anhydride	80	72	MT	15
Triehtylamine	1.5	1.5	MT	30.0
98% Sulphuric Acid	20	10	MT	20
Sodium Carbonate (Na2CO3)	50	50	MT	10
Acetaldehyde	20	16	KL	3.0
Caustic Soda Lye	24	20	MT	10.0
Acetic Acid	2	2	MT	60

Finished goods material storage with days quantity:

List of finished product	Maximum storage capacity	Stored normally	Unit	Days of storage
Benzyl Chloride	160	140	KL	2.0
Benzal Chloride	60	0	KL	0
Benzaldehyde	195	185	KL	4.0
Benzyl Alcohol	320	300	KL	4.0
Benzyl Acetate	80	70	KL	4.0
Di Benzyl Ether	20	0	KL	0
Benzyl Benzoate	60	50	KL	15
Cinnamaldehyde	40	30	KL	3.0
Hydrochloric Acid	1200	1100	KL	3.0
Sodium Benzoate	20 MT	20 MT	MT	5.0

Annexure-3 Health data of workmen

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4							. 7
					1		
							d copy of Photo ID
							o be attached
						1 4	Date: 24/1/2
e-Employment and Perio lease do not leave any bl	dic M edic	al Examin	ation Reco	rd: LanXESS India. Se	rial no		
lease do not leave any bl	anks. Pro	vide supp	ortive expia	iation where needed).	, to be in	led in by	the Candidate.
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(Surnam	e) ^V	(1	First Name)	(M iddle	Name)	- "	
Date of Birth (dd/mm/yy)	m) 09	1 0	119	73	7.		
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E-mail ID:		M obile;	4248	5718 Fax:	7	2	
dentification M ark		1 0-1	1 Eu		. 4		
deticincation at atk	4	F 1200					
ersonal History.(Tick mark	appropr	iate box 8	provide de	tails where appropria	ite):-		
		No	Yes		D	etails	
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Tobacco		10			-	-	
Aicchol Known Allergies						- 1	
Lase: Treatment for eyes	Contact	10				1 3	
ienses	Comec	1					
ast or Present Illnesses (1	lick mark	appropria	te box & p	ovide details where a	ppropria	te):-	
	No				Detai	-	
A-+-							
Diabetes	1				-	.2.+	
Diabetes High Blood Pressure						7.	
High Blood Pressure Heart Disease	-					7.	
High Blood Pressure Heart Discase Convulsions	-					7	
High Blood Pressure Heart Disease Convulsions Asthma						7	
High Blood Pressure Heart Disease Convulsions Asthma TB (Tuberculosis)	1					7	
High Blood Pressure Heart Disease Convulsions Asthma TB (Tuberculosis) Polio						<i>*</i>	
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High Blood Pressure Heart Disease Convulsions Asthma TB (Tuberculosis) Polio	77777						
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High Blood Pressure Heart Disease Convulsions Asthma TB (Tuberculosis) Polio Ear Disease Kidney Disease/ Stones Major Injuries Surgeries Undergone Hospitalization Any other Major Illness Family History:-	No		Details	-	No V	-	Details
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High Blood Pressure Heart Disease Convulsions Asthma TB (Tuberculosis) Polio Ear Disease Kidney Disease/ Stones Major Injuries Surgeries Undergone Hospitalization Any other Major Illness Psychiatric illness Family History:- Asthma Heart Diseases	No		Details	Cancer	No V	-	Details

Pre-employment & Periodic Medical examination Form

Document Number: FORM-000124893



ast occupational history:-					
Name of the Organisation	Trade/ Designation	Period of Se	rvice- Years	Past occupati	ional illnesses
	NA			117	-
	7			N 12 -	
ertify that the forgoing inform	nation provided by n	ne is true & complete to	the best of m	v knowledge. I al:	so declare that
as never declared UNFIT during tion in case of any discrepance are this information with other than the control of the control	ses found in the sam er authorities in Lan	e. I also authorize the ex xess, where the process	amining / cer so demands.	signature of the state of the s	by my free wil
	12-3cm	Waist circumference	cms	Нь	14.9
Height (cms)	173cm 75kg			Hb FBS	14.9
Height (cms) Weight (kgs)		Waist circumference	cms	Hb RBS Urine	14.9 269
Height (cms) Weight (kgs) Body Mass Index (BMI)		Waist circumference Hip circumference Waist/ Hip ratio	cms	Hb F8S Urine EOG	14.9 269 Nome
Height (cms) Weight (kgs) Body Mass Index (BMI)		Waist circumference	cms	Hb RBS Urine	14.9 269 Noma Noma
Height (cms) Weight (kgs) Body Mass Index (BMI) SpD2 Temperature (*F)	75kg	Waist circumference Hip circumference Waist/ Hip ratio Peak-flow meter	cms	PBS Urine ECG Xray chest PA	14.9 269 Noma Noma Noma
Height (cms) Weight (kgs) Body Mass Index (BMI) Sp/2 Temperature (*F)	75kg	Waist circumference Hip circumference Waist/ Hip ratio Peak-flow meter	ons ons Umin	Hb R8S Urine EOG X ray chest PA	14.9 269 Noma Noma
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Page: 3/6

Version 10

Xdirect

Pre-employment & Periodic Medical examination Form



	12		100	Abnormalities	Co	mments
Nails		Normal		Qubbed	7	-
Oral Muc	xosa	Normal	2	Abnormal		
Lymph No	odes	Not enlarg	e	Enlarged		
Speed	h	Mormal		stammer	100	-
Conversationa	l Héaring	Normal		Defective		
Aurosco	ру	Normal				*
Nose		Normal				
Throa	t	Normal			- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•
Thyroi		Normal		Enlarged	T I	
Skin (psoriasis/	eczema etc)	Normal		1		
Romberg sign (1	full minute)	Negative (No sy	vaying)	Positive	+ T.	4
Audiom	etry	Normal		Abnormal		
Audiometry	500	1000	2000	3000	4000	8000
Right Ear	135	30	20	10	25	115
Left Ear	. 40	35	30	20	30	20

**	· @	Abnormal Findings	Comments
Cardiovascular System-Heart sounds Pulse rate- Blood pressure-	Normal Normal /mint.		1
Respiratory System (Air entry/ breath sounds)	Normal	N 10 E	
Alimentary System (Organomegaly)	Mormal	2 4 7 2 4	
Nervous System (sensory and motor system, reflexes, Higher functions)	Normal		
Genitourinary System (Hernia/ hydrocele/ varicocele/ cryptorchidism/ undescended testis)	Normal		1
Muscaloskelet of Doctors (Tourist Doctor)	Normal		
Fitness Status Signed and stamped of examining Doctor Policy Constitution Upon Const	πτ ✓	UNFIT	Additional Tests Needed

Please attach additional sheets for detailed description of abnormal findings

Please attach investigation reports

FORM - 32

Certificate of fitness for Dangerous Operations

(Prescribed under Rule – 107)

Counterfoil	
Serial No.	
Name of person examined PAN	Jaka Jaka
Father's name Shrenit lal	Jein
Sex	
Address 293 TAWAHAA /	Mary Tain colorey Negdo Ju
Name of the factory in which employed/in v	which with a colored to the colored
Process of department in which employed a	wishes to be employed from Bay
Whether certificate granted	wisites to be employed with the control of the cont
Whether declared unfit and certificate refu	red NO V
. Reference number of previous certificate gr	antad or refused
Promona continuate Bi	anted or refused
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Chiller	M. mra
gnature of L.T.L of	N KOHIN IN
	Signature of Certifying Surgoon
erson examined	So BBS V DITE division
	Dr. Moepur Vijain
Certificate	onices
(207)	wallh se.
Serial Number	•400
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Who is desirous of being employed as (Name of factory) in	d PATA Tous (Name) Son (Father's Name) residing at Thurs Culonery Magnetin (Address)
Who is desirous of being employed as (Name of factory) in	d PATA Tous (Name) Son (Father's Name) residing at Thurs Culonery Magnetin (Address)
Who is desirous of being employed as (Name of factory) in	d PATA Tour (Name) Son (Father's Name) residing at The Colorery Nagh To (Address)
Who is desirous of being employed as	(Name) Son (Father's Name) residing at (Address) (Desartment and process), and y examination, is fit / unfit for employment at
Who is desirous of being employed as	(Name) Son (Father's Name) residing at (Address) (Department and process), and y examination, is fit / unfit for employment at
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Annexure-4 Fire NOC



संचालनालय,नगरीय प्रशासन एवं विकास, म.प्र.,भोपाल Directorate of Urban Administration & Development, M.P., Bhopal पालिका भवन ,शिवाजी नगर,भोपाल -४६२०१६ Palika Bhawan, Shivaji Nagar, Bhopal -462016

अग्नि शमन प्रकोष्ट Fire Cell अनापत्ति प्रमाण पत्र No Objection Certificate

जावक क्रमांक / Dispatch Number

: 6000003545/FNOC/CIT/2019/4677

आवेदन की तिथि / Application Date

: Jul 4, 2019

जावक की तिथि / Dispatch Date.: Aug 13, 2019

आवेदक का नाम / Applicant Name

: Sanjay Singh

आवेदक का पता / Applicant Address

Flat No. 2 Lanxess Executive Block Chemical Staff Colony Nagda

. :

अनापत्ति प्रमाण पत्र का प्रकार / Type of NOC: RENEWAL

अधिभोग का प्रकार / Type of Occupancy

ईमारत का ऊंचाई / Building Height

: 10 (मीटर में / Meter)

भूमि / भवन का क्षेत्रफल / Plot / Building Area: 61850 (Sq.Mtr)

संपत्ति का पता / Property Address

Lanxess India Private Limited A. T. Gram Mehatwas, Birlagram

Teh.- Nagda. Dist. Uiiain Nagda

अग्नि प्राधिकारी द्वारा अनुमोदित / Approved by Fire Authority :

टिप्पणि / Remarks:

प्रति.

लेन्सेक्स इण्डिया प्रा.लि.,

ग्राम मेहतवास, तह. नागदा,

जिला उज्जैन (म.प्र.)

विषय:- रिक्वेस्ट नम्बर 6000003545 - लेन्सेक्स इण्डिया प्रा.लि. द्वारा ख.नं. 166/2 एवं अन्य ग्राम मेहतवास, तह. नागदा, जिला उज्जैन में निर्मित 10 मी. ऊचे एवं 61850 वर्ग मी. क्षेत्रफल के औधोगिक भवन को प्रदाय अस्थायी फायर अनापित प्रमाण पत्र में "समयवृद्धि" प्रदाय करने के संबंध में। .--

विषयान्तर्गत लेन्सेक्स इण्डिया प्रा.लि. द्वारा ख.नं. 166/2 एवं अन्य ग्राम मेहतवास, तह. नागदा, जिला उज्जैन में निर्मित 10 मी. ऊचे एवं 61850 वर्ग मी. क्षेत्रफल के औधोगिक भवन को प्रदाय अस्थायी फायर अनापत्ति प्रमाण पत्र में समयवृद्धि चाही गई है।

गठित समिति द्वारा प्राप्त आवेदन का परीक्षण किया गया, प्रकरण का विवरण निम्नान्सार है। समिति द्वारा प्रस्तावित निम्नलिखित प्रावधान एवं शर्तों का पालन आवेदक को करना आवश्यक होगा :-

1. लेन्सेक्स इण्डिया प्रा.लि., ग्राम मेहतवास, तह. नागदा, जिला उज्जैन को कार्यालय के जारी पत्र दिनांक 26.09.2016 दवारा अस्थापयी फायर अनापत्ति प्रमाण पत्र प्रदाय किया गया था।



संचालनालय,नगरीय प्रशासन एवं विकास, म.प्र.,भोपाल Directorate of Urban Administration & Development, M.P., Bhopal पालिका भवन ,शिवाजी नगर,भोपाल -४६२०१६ Palika Bhawan, Shivaji Nagar, Bhopal -462016 अग्नि शमन प्रकोष्ट Fire Cell अनापत्ति प्रमाण पत्र No Objection Certificate

जावक क्रमांक / Dispatch Number

: 6000003545/FNOC/CIT/2019/4677

आवेदन की तिथि / Application Date

: Jul 4, 2019

जावक की तिथि / Dispatch Date : Aug 13, 2019

आवेदक का नाम / Applicant Name

: Sanjay Singh

2. कार्यालय, उप संचालक, नगर तथा ग्राम निवेश, उज्जैन दवारा दिनांक 21.08.2009 एवं मुख्य कारखाना निरीक्षक, म.प्र. इन्दौर के जारी पत्र दिनांक 07.12.2012 द्वारा प्रदाय अन्जा में लिखित सभी शर्तों को मान्य करना अनिवार्य होगा ।

- 3. बहमंजिला भवन के लिए आर्किटेक्ट/स्ट्रेक्चर इंजीनियर तथा भवन मानिक के हस्ताक्षर से जानकारी ली गई ।
- 4. भवन का स्थल निरीक्षण नियमानुसार विभाग के योग्यताधारी/अर्हताधारी अधिकारी श्री अजय सिंह राजपूत, फायर ऑफिसर, नगर पालिक निगम, उज्जैन द्वारा भवन के फायर कंसलटेन्ट एवं मालिक की उपस्थिति में उपकरणों को संचालित कराकर तैयार किया गया है। मौका निरीक्षण रिपोर्ट में फिक्स फायर इन्स्टालेशन भवन में स्थापित फस्ट फायर फाईटिंग व्यवस्था स्थल निरीक्षण के समय निर्धारित मापदण्ड अनुसार पाई गई है, जिसका स्पष्ट उल्लेख निरीक्षण प्रतिवेदन में किया गया है । निरीक्षण रिपोर्ट में उल्लेखित प्रावधान नेशनल बिल्डिंग कोड भाग-04, फायर सेफ्टी के प्रावधानों अनुसार स्थापित किये गये है जिसका निरीक्षण प्रतिवेदन में विस्तृत उल्लेख किया गया है।
- लेन्सेक्स इण्डिया प्रा.लि., ग्राम मेहतवास, तह. नागदा, जिला उज्जैन को निरीक्षण रिपोर्ट में उल्लेखित प्रावधानों के साथ-साथ फायर सेफ्टी हेत् नेशनल बिल्डिंग कोड-2005 के भाग-04 में निर्धारित अन्य आवश्यक प्रावधानों एवं निर्धारित आई.एस. मानकों का पालन करना अनिवार्य होगा। स्थल निरीक्षण में इन प्रावधानों का पालन न पाये जाने पर "अग्नि प्राधिकारी" को एनओसी निरस्त करने का पूर्ण अधिकार होगा।
- 🧲 आवेदक को नियमानुसार स्थापित अग्निशमन उपकरणों का निर्धारित आई.एस. मानकों के अनुसार प्रावधानित समय-सीमा में सेधारण करना एवं संधारण हेत् आवश्यक अर्हताधारी कर्मचारी रखना अनिवार्य होगा ।
- 7. अतः लेन्सेक्स इण्डिया प्रा.लि., ग्राम मेहतवास, तह. नागदा, जिला उज्जैन दवारा प्रस्तृत वचन पत्र, निर्धारित प्रपत्र में जानकारी व निरीक्षण रिपोर्ट के आधार पर फायर एनओसी जारी आदेश से 3 वर्ष की अविध के लिये फायर एनओसी में समयवृद्धि प्रदाय किया जाना उचित होगा। अग्नि शमन कार्य हेत् स्थापित उपकरण सुचारू रूप से कार्य कर रहे है, इस आशय का वचन पत्र जारी एनओसी के दिनांक से एक माह पूर्व प्रत्येक वर्ष प्रस्तुत करना आवश्यक होगा । 03 वर्ष की अवधि समाप्त होने के 1 माह पूर्व नवीनीकरण हेत् पुन-आवेदन प्रस्तुत करना अनिवार्य होगा ।

अतः गठित समिति की अनुशंसा अनुसार उपरोक्त लिखित शर्ती एवं प्रावधानों के तहत फायर अनापत्ति प्रमाण पत्र में "समयवृद्धि" प्रदाय करने की स्वीकृति "अग्नि प्राधिकारी" द्वारा प्रदाय की गई है और तद्नुसार स्वीकृति आदेश जारी किया जाता है ।

(अग्निशमन प्राधिकारी द्वारा स्वीकृत/अनुमोदित)



संचालनालय,नगरीय प्रशासन एवं विकास, म.प्र.,भोपाल Directorate of Urban Administration & Development, M.P., Bhopal

पालिका भवन ,शिवाजी नगर,भोपाल -४६२०१६ Palika Bhawan, Shivaji Nagar, Bhopal -462016

> अग्नि शमन प्रकोष्ट Fire Cell

अनापत्ति प्रमाण पत्र No Objection Certificate

जावक क्रमांक / Dispatch Number

6000003545/FNOC/CIT/2019/4677

आवेदन की तिथि / Application Date

Jul 4, 2019

जावक की तिथि / Dispatch Date : Aug 13, 2019

आवेदक का नामं / Applicant Name Sanjay Singh

> **LAXMAN** SINGH **BAGHEL**

Digitally signed by LAXMAN SINGH BAGHEL

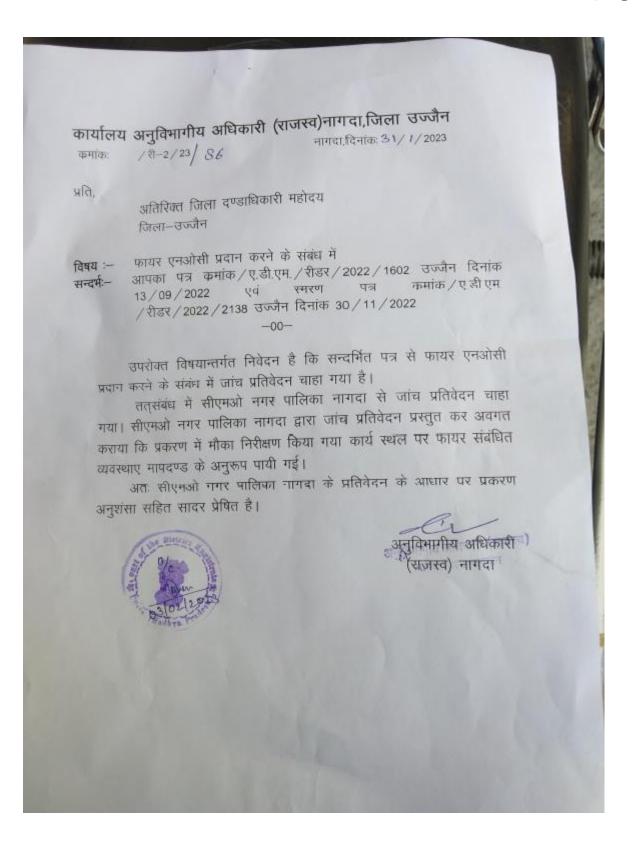
Date: 2019.08.13 18:34:15 -12'00'

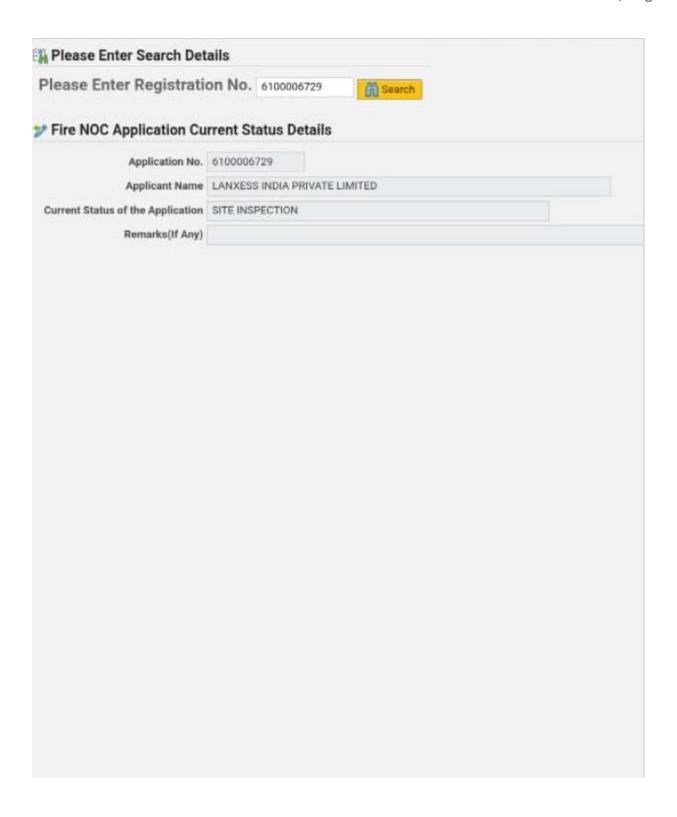
अधीक्षण यंत्री,

Superintendent Engineer नगरीय प्रशासन एव विकास,

Urban Administration & Development

म.प्र.,भोपाल M.P.,Bhopal





Annexure-5: P.O copy Flame proof equipment

Ordering address:
FCG HI Tech Pvt. Ltd.
Mamasaheb Warerkar Bridge
Shree Pant Bhuvan, Mazzaning FI 1
MUMBAI
Maharashtra
400007
INDIA
Region: Maharashtra
GSTIN: 27AAACF7780P2ZW
Email to: mktg7@fcghitech.com

Invoicing Party:
FCG HI Tech Pvt. Ltd.
Plot No. 202
II Phase G.I.D.C
Vapi
VALSAD
Gujarat
396195
INDIA
Region: Gujarat
GSTIN: 24AAACF7780P1Z3

Energizing Chemistry

LANXESS India Private Limited LANXESS House, Plot no: A 162-164, Road No 27, MIDC, Wagle Estate, Thane (W) - 400604 Maharashtra, India Phone: +91 22 2587 1000 (Board) Fax: +91 22 2587 1287 Internet: www.lanxess.in

Date: 16.03.2022

Change to Purchase order No. 312219635

Procurement/contact: Email: Pravin Kale +91(0)2225871000 Pravin.Kale@lanxess.com Please state our order no., line item no., HSN/SAC code, material no. and delivery address on all delivery documents, delivery items and invoices. Please send always a order confirmation via e-mail. PO date 22.10.2021 20.12.2021 Delivery Date Send correspondence please exclusively to the e-mail address: Pravin.Kale@lanxess.com Header text YOUR OFFER NO. 003711 DATE 06.10.2021. MAKE : FCG Item no. Quantity Value (INR) 15.00 PCE FLP JB 320X320MM CST-2.5SQMM 3/4"&1"ET JUNCTION BOX FLP 320X320MM,16W CST-2.5SQ.MM(40N),3/4"&1"ET MAKE - FCG Sudhir Our material no.: 58111372 Gross Price INR/ 1 PCE Discount % on Net 5.00-% 6.037.50-Unit price (INR): 7,647.50/ PCE HSN/SAC code: 8536 Total net value excl. tax: INR

With acceptance of the purchase order the Supplier will go conform with all applicable laws and regulations, including but not limited to all regulatory requirements, in the country of manufacturing and sale. The supplier will also comply with the Supplier Code of Conduct of LANXESS (available unde https://lanxess.com/-/media/Project/Lanxess/Corporate-Internet/Company/Procurement/Conditions-of-Purchase/BP-CoC_1Pager_EN_FINAL.pdf).

Terms of payment 100% Against Proforma Invoice

Annexure-6: Drinking water supply invoice copy

24082286500385

NITIN KOTHARI

Water Supplier

Add.- Ojha Colony Gali No.3 Nagda Distt. Ujjain Pin - 456335 P.O. No. – 312299782 Date - 15-07-2022 Mob. No. 9770458074 Bill No.- 48 Date - 09/08/2022

Name - MS. Lanxess India PVT LTD. Birlagram Nagda

NO.	Particular	Trip	Rate per Trip	Amount
1	Drinking Water Supply for	106		
	Lanxess 26-06-2022 to			
	25/07/2022			
	·			
	-			
	Total			
·				

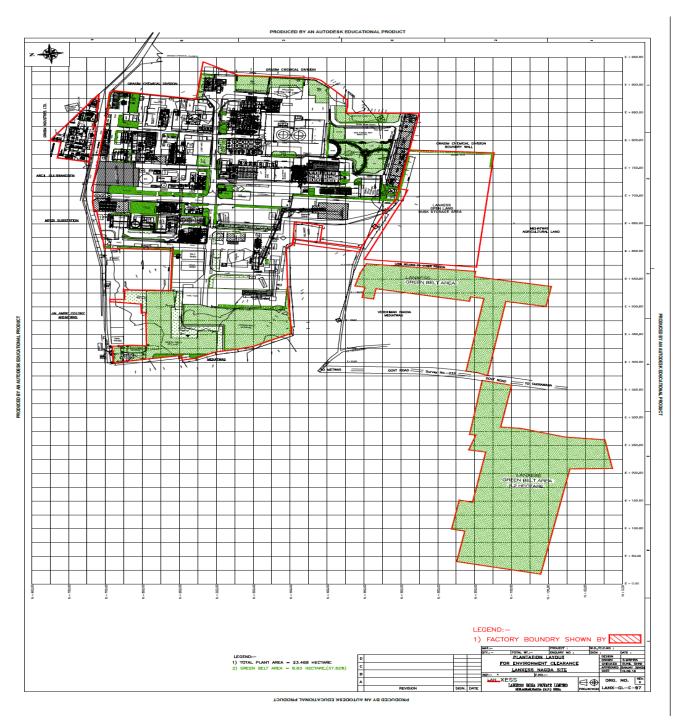
1005923705



Annexure-7: List of by products and use

List of by product	Use of By-product
31% Hydrochloric Acid	Sold to genuine customers only

Annexure-8 Green Belt area of the site









Annexure-9 Public hearing point wise compliance

Public Hearing Point wise compliance

Oursian/Summertians	Public Hearing Point wise compliar		Time of
Queries/Suggestions	Replies and Action plans	Cost	compliance
Employment generation from enhancement of production	LIPL informed that Project activities will generate direct and indirect employment opportunities in the form of skilled, semi-skilled and unskilled workers etc. A total of additional 150 persons will get chance to be employed. Preference will be given to locals for employment. Secondary jobs will be generated to provide day-to-day needs and services to the work force. This will also increase the demand for essential daily utilities in the local market and ancillary business development to some extent for the local population.	Included in Project Cost	As per expansion requirement
Air pollution control measures to be corrected. Latest techniques / devices to be deployed for control of Air and Water pollution	LIPL will install properly designed additional pollution control equipment even in the existing plant as per revised emission and effluent standards published by MoEF&CC from time to time as recommended, no effluents, treated or untreated, will be allowed to go out of the plant and will be treated and recycled within the plant. Plant will be able to strictly comply with all the mitigation measures and prevailing environmental norms. Also, plant will develop various management activities for the Environmental Management Program to meet all statutory requirements and help to improve environmental quality.	5.50 crores included as EMP Cost.	According to expansion and then monitor regularly
Suggestion to avoid the discharge of waste water outside unit was provided. However, MPPCB has not given permission to discharge waste water outside the unit and same was also not found.	No waste water is being discharged now. After expansion also, all the waste water generated will be treated and reused. No untreated or treated waste water will be discharged outside. This meets 'Zero Liquid Discharge'.	3.0 crore for Zero Liquid Discharge Plant included as EMP Cost	According to expansion and then monitor regularly

Queries/Suggestions	Replies and Action plans	Cost	Time of compliance
Providing safe drinking water and high quality health care facilities to villagers	(i) Safe Drinking Water: The LIPL assured that Construction of pump house, overhead tanks and water pipes for supply of drinking water to nearby villages as advised by the District Administration will be done under the CER/CSR.	Covered under CER and CSR Costs	5 years under CER/ as recommended by EAC and then under CSR
	(ii) Health Care Facilities: Infrastructure for Periodic medical check-up camp by appointing specialist doctor for eyes, skin, heart and dental in a year will be done under CER/CSR for nearby villages as advised by the District Administration.	Covered under CER and CSR Costs	5 years under CER/ as recommended by EAC and then under CSR
To ensure community development, the unit to help nearby villagers in getting education and healthcare facilities	(i) Education: Infrastructure for development of technical skills and training to the local persons will be done under CER/CSR for nearby villages as advised by the District Administration. Assistance in providing study materials, uniform, books to the poor students located nearby area will be done under CER/CSR. Construction of school building & community center in nearby villages will be done under CER/CSR. (ii) Healthcare Facilities: Infrastructure for Periodic medical check-up camp by appointing specialist doctor for eyes, skin, heart and dental in a year will be done under CER/CSR for nearby villages as advised by the District Administration. Training to the farmers related to healthcare and crop production will be done under CER/CSR.	Covered under CER and CSR Costs	5 years under CER/ as recommended by EAC and then under CSR
Ensure measures for environment conservation and control. Ensure that work is properly conducted	(i) Environment Conservation and Control: LIPL will install properly designed pollution control equipment as per latest standards as recommended, Plant will be able to strictly comply with all the mitigation measures and prevailing	Covered above	According to expansion and then monitor regularly

Queries/Suggestions	Replies and Action plans	Cost	Time of compliance
in unit and local people are provided employment.	environmental norms. Also, plant will develop various management plans and implement them as activities for the Environmental Management Program to meet all statutory requirements and help to improve environmental quality.		
	LIPL informed that Project activities will generate direct and indirect employment opportunities in the form of skilled, semi-skilled and unskilled workers etc. A total of additional 150 persons will get chance to be employed. Preference will be given to locals for employment. Secondary employment will be generated to provide day-to-day needs and services to the plant and work force. This will also increase the demand for essential daily utilities in the local market and ancillary business development to some extent for the local population.	Included in Project Cost	As per expansion requirement
In view of polluting conditions, ensure deployment of Air, Water and Noise monitoring stations so that environment management plan be implemented in more effective matter.	LIPL will install properly designed pollution control equipment as recommended, Plant will be able to strictly comply with all the mitigation measures and prevailing environmental norms. Also plant will develop various management activities for the Environmental Management Program to meet all statutory requirements and help to improve environmental quality.	Covered above	According to expansion and then monitor regularly

<u>Annexure-10</u> CSR activities done by LANXESS India Private Limited

Year	CSR - Event Particular	Ar	mount of Expenses
2010	Supportd SNEH - Special Need Education Home	₹	500,000.00
2011	Supporting of Education of children at different villages	₹	500,000.00
2012	Sewing Machines @ Chambal Sagar Colony	₹	300,000.00
2012	Sewing Machines @ Mehatwas Sagar Colony	₹	300,000.00
2012	16 Solar lights in Mehtwas Community	₹	500,000.00
2012	Sewing Machines @ Durgapura	₹	450,000.00
2012	Public Library @ Nagda	₹	2,525,000.00
2012	Supported to SNEH - Special Need Edcuation Home	₹	1,100,000.00
2013	Supported by Drinking Water Cooler & Purifiers	₹	300,000.00
2013	Donated College Bus to Municipal Corporation Nagda	₹	1,300,000.00
2014	LANXESS Supported Computor LAB	₹	1,000,000.00
2015	Supporteed Dainik Bhaskar Sapling Plantation Drive	₹	500,000.00
2015	Donated Digital X-Ray Machine to Civil Hospital Nagda	₹	1,000,000.00
2016	Donation of Dialysis Machine to Civil Hospital Nagda	₹	1,000,000.00
2017	Donation of Sonography Machine to Civil Hospital Nagda	₹	1,050,000.00
2017	Donation of Digital SMART classe equipment to Govt. College Nagda	₹	1,400,000.00
2017	Drinking Water overhead tank rennovation @ Mehtwas	₹	1,000,000.00
2017	Green Garden Development	₹	900,000.00
2017	Solar Street Lights in Durgapura & Mehatwas	₹	650,000.00
2017	Drinking Water Tank in 03 Villages	₹	450,000.00
2018	Donation of Dialysis Machine to Civil Hospital Nagda	₹	650,000.00
2018	Set up of Recreational and Culutral Center	₹	8,250,000.00
2018	Public Digital Library set up @ Nagda	₹	5,450,000.00
2019	Setup of Intensive Care Unit (ICU) @ Civil Hospital Nagda	₹	11,550,000.00
2019	Drinking water storage system for nearby villages	₹	1,150,000.00
2019	Transportation for SNEH (School for special kids) & Govt. School	₹	1,350,000.00
2019	Solar street light energy conservation	₹	750,000.00
2019	Green environment plantation	₹	1,150,000.00

2020	Sanitizer Cabin - Covid-19 Support	₹	45,000.00
2020	Sanitizer - Covid-19 Support	₹	180,000.00
2020	Sanitizer - Covid-19 Support	₹	180,000.00
2020	Grocery for Society support - Covid-19	₹	250,000.00
2020	Grocery for Society support - Covid-19	₹	150,000.00
2020	Grocery for Society support - Covid-19	₹	10,000.00
2020	X-Ray Cassettes medical equipment @ Civil Hospital	₹	550,000.00
2020	Water Tank @ Umarna	₹	350,000.00
2020	Face Mask from Thane Office	₹	140,000.00
2021	Fumigator and other Medical Equipment @ Civil Hospital nagda	₹	730,000.00
2021	ESIC Hospital Oxygen Line Civil Hospital Rogi Kalyan Samiti Cheque	₹	1,000,000.00
2021	Oxygen Concentrator	₹	1,150,000.00
2021	Ventilators to Hospital @ Ujjian Covid- 19	₹	5,650,000.00
2021	Covid-19 VACCINATION Camp	₹	450,000.00
2021	Christian Mission Hospital Support Covid 1 9	₹	250,000.00
2021	Rain Water Harvesting	₹	1,333,294
2022	Rain water harvesting and ground water recharge in 4 villages	₹	2,513,913
2022	Installation of Drinking water tank in 5 villages	₹	1,587,924
2022	Solar power panel installation in government school & offices	₹	3,696,398
2022	Digital SMART Class in municipal schools	₹	1,849,930
2022	Energizing Chemistry – Setting up Chemistry Lab in Govt. Girls School	₹	648,884
2022	Upliftment of Govt. Nursery Play School	₹	431,000
2022	District Collector Clean India initiative	₹	300,000
2022	Govt Public Library	₹	634,512
	Total	₹	71,275,202

Annexure-11 Environment statement

Date: 28.09.2022

LANXESS Energizing Chemistry

LANXESS India Private Limited

Registered Office : LANXESS House Plot Nos. A 162-164 Road No. 27, MIDC

Wagle Estate Thane (W) - 400 604 Maharashtra, India

Tel. + 91 22 2587 1000 Fax + 91 22 2587 1287

infoindia@lanxess.com www.lanxess.in

Fax + 91 7366 246283

CIN: U24119MH2004PTC158377 Works: Birlagram, Nagda - 456 331 Madhya Pradesh, India

Tel. + 91 7366 245104, 248735, 245447

LIPL/NGD/HSE/2022/243

To,
The Member Seretory,
M.P. Pollution Control Board,
Paryavaran Parisar,
E-5 , Arera Colony
Bhopal – 462 016

Subject: Environmental Statement for the Financial Year 2021–22.

Dear Sir,

Please find the enclosed herewith Environmental Statement for the financial Year 2021 – 22.

Hope you will find the same in order.

Yours faithfully

For LANXESS India Private Limited

Sanjay Singh

Vice President – Head of Manufacturing e-Mail: sanjayk.singh@lanxess.com

CC:

- The Regional Office, MP Pollution Control Board,
 17-Bharatpuri, Ujjain
- The Sub Regional Office, MP Pollution Control Board, H-1 HIG, Ingoria Road, Nagda

INTERNAL

INTERN





Environmental Statement for the financial year ending the 31st March, 2022

PART - A

i) Name and address of the Owner/Occupier - SHRI BALRAM KHOT

of the industry, operation or process

LANXESS India Private Limited

Birlagram NAGDA (M. P.)

ii) Industry category

- RED / Miscellaneous - RED

Primary :- (STC Code) Secondary :- (SIC Code)

iii) Production capacity :- Units

Sr.No.	Name Of Product	Production Capacity As per Consent (MT/Year)	Production (2021-22 (MT)
1	Benzyl Chloride	54750	42347
2	Benzal Chloride	32850	28459
3	Benzyl Alcohol	36000	21782
4	Benzyl Acetate	7200	6171
5	Benzaldehyde	19000	16531
6	Hydochloric Acid	212400	149844
7	Sulphur Di Chloride	12400	52
8	Sodium Benzoate	2500	1202
9	Thionyl Chloride	50000	13174
10	Di Benzyl Ether	3600	1945
11	Cinnamaldehyde	3000	2951
12	Benzyl Benzoate	3000	1580

13	Steam Generation by 25 TPH (AF BC Type) Boiler	25 TPH Boiler LANXF	22
14	Power generation (Co-generation Plant)	3.95 MW with 45 TPH Boiler Energizing C	hemistry
15	Captive Incinerator	375 Kg/Hr (Design Quantity) @ 1000-1200 I	Deg C

iv)Year of establishment

- 1978

 v) Date of the last environmental statement submitted - 22.09.2021

PART - B

Water & Raw Material Consumption

i) Water consumption - M3 / day

Process

513 (513 Recycle Water)

Cooling

1635 (1390 Treated Colony Sewage + 245 Purchased Steam)

Domestic

9 (Drinking water)

Name of Products	Process water consumption per product output			
	During the current financial year 2020 - 2021	During the current financial year 2021 - 2022		
Benzyl choride	1.04	1.04		
2. Benzal Chloride	1.51	1.51		
3. Benzaldehyde	2.34	2.34		
4. Sodium benzoate	2.39	2.39		
5. Benzyl Alcohol	3.63	3.63		
6. Thionyl Chloride		/= **		
7. Biomass based Power Plant	2.34	2.34		

ii) Raw Material consumption

Name of Products

Name of

LANXESS
Energizing Chemistry

	During the previous financial year 2020 – 2021		Transaction of the contract of			
aw naterials				financial year	During the current financial year 2021 - 2022	
During the p	previous fina	incial year	2020 - 2021			
Raw Mater	rial	Benzyl Chloride	Benzal Chloride	Benzal dehyde	Benzyl acetate	Thionyl chloride
Toluene		0.739	0.571		-	
Chlorine		0.551	0.877		-	0.597
Soda Ash				0.082		
Caustic As	sh	**				
Ac Anhydi	ride				0.650	
Sulphuric Acid				0.016	-	
Sulphur						0.180
Sulphur tri	Oxide					0.233

Consumption of raw material per unit of product

During the current financial year 2021 - 2022

Raw Material	Benzyl Chloride	Benzal Chloride	Benzal dehyde	Benzyl acetate	Thionyl chloride
Toluene	0.737	0.569			
Chlorine	0.549	0.873			0.599
Soda Ash			0.084		
Caustic Ash					
Ac Anhydride				0.650	
Sulphuric Acid			0.016		
Sulphur			-		0.180
Sulphur tri Oxide					0.232

PART - C

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

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume) mg/L except pH	Percentage of variation from prescribed standard
a) Water	Yearly Average pH:- Nil S.S:- Nil mg/l COD:- Nil mg/l BOD:- Nil mg/l	Yearly Average pH:- Nil S.S:- Nil mg/l COD:- Nil mg/l BOD:- Nil mg/l	NA – Not applicable as During the period no pollutants discharged, Recycled all treated effluent by post treatment R.O. & Evaporator system.

				LANYFSS
b) Air	-	PM10 PM2.5 SO2 NOx CO NH3 Lead as Pb Ozone Benzene Benzo(a)Pyr Arsenic Nickel	- 49.07 - 28.29 - 22.51 - 23.50 - 392 - 0.46 - ND - ND - ND - ND - ND - ND - ND	All the parameters are within the profits. Energizing Chemistry

PART – D Hazardous Wastes

Sr. No	Hazardous waste	Cat.	Generation during the previous financial year 2020 – 2021	Generation during the current financial year 2021 – 2022
1	Used or Spent Oil	5.1	0.800 MT	11.099 MT
2	Empty barrels/Containers /Liners/contaminated with hazardous chemicals/wastes	33.1	0.400 MT	0.000 MT
3	Ash from Incinerator	37.2	0.000 MT	0.000 MT
4	Chemical sludge from waste water treatment – Evaporator Salt	35.3	2248.629 MT	1974.460 MT
5	Spent ion exchange resin	35.2	0.200 MT	0.000 MT
6	Chemical sludge from waste water treatment – ETP Sludge	35.3	1365.140 MT	1033.720 MT
7	Any Process or distillation residue (residue for preprocess)	36.1	2618.274 MT	2455.224 MT
8	Any Process or distillation residue (Captive Inc.)	36.1	2046.505 MT	1459.653 MT
9	Any Process or distillation residue (Ind. Salt)	36.1	1772.960 MT	2924.530 MT
10	Spent Carbon or filter medium (Process Waste)	36.2	236.390 MT	271.490 MT
11	Exhaust Air or Gas cleaning residue (HCL from Inc.)	35.1	Nil	Nil
12	Oil and Grease , Skimming (ETP O&G)	35.4	1.52	3.800 MT
13	Chemical-containing residue arising from decontamination.	34.1	Nil	Nil
14	Sludge from treatment of waste water arising out of cleaning /disposal of barrels / containers	34.2	Nil	Nil
15	Oily rages/DG-filters etc	35.4	Nil	Nil

Hazardous Waste	Total Quantity ANV FO			
1990 (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990) (1990)	During the previous financial year 2020-21	Internet the concern of internet all years 2021-52 engine Chemistra		
Bio-Medical Waste				
a) Yellow category	47.650 KG	172.700 KG		
b) Red category	4.930 KG	4.500 KG		
c) White category	0.00 KG	0.000 KG		
d) Blue category	0.00 KG	0.000 KG		
E-Waste	Nil	Nil		

PART - E

Solid Waste

	Total Q	uantity
	During the previous financial year 2020 – 2021	During the current financial year 2021 - 2022
LDPE Scrap	13700 KG	13380 KG
2. HDPE Scrap	8197 KG	2352 KG
PVC Scrap	1030 KG	2190 KG
4. PAPER SCRAP	25340 KG	24690 KG
5. WOODEN SCRAP	40490 KG	45640 KG
6. STEEL (MS, SS) SCRAP	-	203510 KG

PART-F

Please specify the characterizations (in term of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes. Analysis reports of hazardous waste is attached for reference.

Ref. to Annexure - I

PART - G

Impact of the pollution control measures on conservation of natural resources and on the cost of production.

Conservation of natural resources

In order to conserve the natural resources like coal and fresh water we have taken the following measures.

Use of Biomass instead of Coal for generating steam and power in our Cogen plant, during last financial year 87140 MT biomass was used which conserve 76079 MT of Coal and thereby reducing generation of 139148 tons of eCO2 (Greenhouse gas).

Sewage water taken from nearby colonies and used for utility after proper treatment. It has been preventing releasing of domestic polluted water into the river Chambal.

PART-H



Additional measures/investment proposal for environmental protection including abetment of pollution, prevention of pollution.

Water Pollution

We are a Zero Liquid Discharge Plant. We are having Effluent treatment plant having capacity of 300 M3/day. The quality of final treated effluent are meets all the parameters as laid by M.P. Pollution Control Board and further treat the ETP treated water through Waste Water Post Treatment Reverse Osmosis plant, Evaporation System and reuse in process and cooling.

Sludge Dryer for ETP sludge and Evaporator sludge has been provided with capacity 5 tons feed and 1.5 ton output per day.

Air pollution :-

Best available Scrubbing and Absorbing system have been installed with the production units under closed loop for the complete absorption of Chlorine, Hydrochloric acid gases. Provided online monitoring system for measuring of Chlorine, HCL, Hydrocarbon gases. Dust extraction system for bio-mass handling area. Increasing green area with in the plant. Installed CAAQMS and Online stack Monitoring system for Incinerator.

PART-I

Any other particulars on respect to environment protection and abatement of pollution.

Recycling of colony Sewage water

After treatment used as cooling tower makeup water.

Proper utilization of effluent by Reverse Osmosis and Evaporation systems during the year.



Annexure :- I

Sr. No.	Waste Stream	Name	Mode of Storage	Mode of Disposal
1	5.1	Used or Spent Oil	Store in MS/HMHDPE drums at isolated place under shed.	To be sold to authorized Re-processors/ Recycler authorized with SPCB.
2	33.1	Empty barrels/Containers /Liners/contaminated with hazardous chemicals /wastes	Store at isolated place under shed.	At Captive Incinerator or M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or To be sold to authorized Re-processors, Recycler authorized with SPCB.
3	37.2	Ash from Incinerator	Store in HMHDPE drums at isolated place under shed.	Common TSDF , Pithampur Dist :- Dhar M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing .
4	35.3	Chemical sludge from waste water treatment – Evaporator Salt	Store in Bags at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing .
5	35.2	Spent ion exchange resin	Store in HMHDPE Drums / Bags at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing .
6	35.3	Chemical sludge from waste water treatment – ETP Sludge	Store in Bags at isolated concrete floor covered with shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing with due permission from the disposal destination SPCB.
7	36.1	Any Process or distillation residue (residue for preprocess)	Store in HMHDPE Drums at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing
8	36.1	Any Process or distillation residue (Captive Inc.)	Store in HMHDPE Drums / Bags at isolated place under shed.	Captive Incinerator/CTSDF /Pre-processing.
9	36.1	Any Process or distillation residue (Ind. Salt)	Store Bags at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar or preprocessing .
10	36.2	Spent Carbon or filter medium (Process Waste)	Store in HMHDPE Drums / Bags at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing .
11	35.1	Exhaust Air or Gas cleaning residue (HCL from Inc.)	Store in HMHDPE tank.	Treatment at captive ETP / M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing.
12	35.4	Oil and Grease , Skimming (ETP O&G)	Store in MS/HMHDPE drums at isolated place under shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing
13	34.1	Chemical containing residue arising from decontamination.	Store in HMHDPE drums at isolated place under shed.	Captive Incineration M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing
14	34.2	Sludge from treatment of waste water arising out of cleaning /disposal of barrels / containers	Store in Bags at isolated concrete floor covered with shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing .
15	5.2	Oily rages/DG-filters etc.	Store in Bags at isolated concrete floor covered with shed.	M.P. Waste Management Project, Pithampur, Dist. Dhar (M.P.) or pre processing or Co- processing.

Annexure- 12 Copy of Advertisement

Ministry of Environment, Forest and Climate, has issued an approval for production expansion to LANXESS India Private Limited, Birla Village, Nagda. A copy of the sanction letter No. F-No.-IA-J-11011/350/2018-IA-II(I) is available with the State Pollution Control Board and can be downloaded from the website of the Ministry of Environment, Forest and Climate change at http://www.envfor.nic.in and it can also be accessed on and https://lanxess.in.

सववा

पर्यावरण, वन एवं जलवायु मंत्रालय द्वारा जारी लैंसेक्स इंडिया प्राइवेट लिमिटेड, बिरला ग्राम, नागदा को उत्पादन विस्तार हेतु मंजूरी मिली है। मंजूरी पत्र नं. F-No. - IA-J-11011/350/2018-IA-II(I) dated 17.6.2021 की प्रतिया राज्य प्रदूषण नियंत्रण बोर्ड के पास उपलब्ध है और इसे पर्यावरण, वन एवं जलवायु मंत्रालय की वेबसाइट http://www.envfor.nic.in और https://lanxess.in पर भी देखा जा सकता है।

Annexure-13 PLI Policy

HDFC ERGO General Insurance Company Limited



Held Cover Letter

Date: 01st January'23

To,

Insured Name: LANXESS INDIA PRIVATE LIMITED

Place of Supply: Mumbai GSTIN: 27AACCB3880A2Z0

A 162 to 164, Lanxess House, Road No 27, Thane, Thane, Maharashtra, 400604

Policy Name: Public Liability Act - PLACT

Dear Sir / Madam,

We would like to thank you for having preferred us for your Insurance requirements and hereby confirm acceptance of below captioned risk, basis the details given below:

Name of the Client	LANXESS INDIA PRIVATE LIMITED
Type of Policy	Public Liability Act - PLACT
Type of Business	Renewal
Quote No	RF11202200434410
Policy Period	01 st Jan 2023 to 31st December 2023
Hypothecation Details	NA
Terms and Conditions	As per Quote Attached
Intermediary Name	PERAJ INSURANCE BROKERS PVT LTD

Activity	Address
Plant	Lanxess India Pvt Ltd,Birlagram Nagda,District
	Ujjain,Madhya Pradesh - 456331
Plant	LANXESS India Private Limited, Plot No. 748/2/A, 748/3,
	748/4/B, 748/4/A GIDC, Furwadi, Jhagadia 393110,
	Bharuch, Gujarat

Note: This letter is being issued in interim till Policy is issued by the Company in due course. Terms and conditions of the coverage shall be as per the policy document issued.



Authorised Signatory

Company Confidential

Annexure- 14 Noise monitoring report

Noise Monitoring Report

resist members										
Year 2022 - 2023	Point - A: Near Coal Yard - (Mehatwas Side)		Pont - B : Co-Gen Gate D		Point - C: Near Gate B		Point - D : South Side (Takravada Side)			
Standard	75(db)		75(db)		75(db)		75(db)			
Month	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
October -22	46.3	59.5	46.5	61.3	44.6	58.8	45.4	61.5		
November- 22	48.4	67.2	47.3	65.5	46.1	65.2	48.1	68.3		
December- 22	47.6	64.4	49.9	65.8	50.9	64.1	48.7	62.3		
January-23	51.1	64.4	50.2	65.8	50.9	64.1	51.4	62.1		
February -23	46.3	59.5	46.5	61.3	44.6	58.8	45.4	61.5		
March – 23	47.4	74.8	48.8	78.4	44.6	63.4	47.6	64.1		

Annexure-15 Photographs of Environmental Lab



TRAINTS

PRIVATE

PRI

Noise Monitor



Turbidity meter

pH meter



COD analyzer

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

Detailed compliance information has been attached in supporting documents.