

PERIOD: **DECEMBER 2022 TO MAY 2023**

EC File No: SEAC 2011/CR -511/TC-2 dated 30th June 2012
Amendment in EC Letter : SEIAA-2019/CR-62/SEIAA Dated 25.04.2019

Submitted By

M/s. VN Creative Chemicals Private Limited
Plot No C-104, Mahad MIDC, Raigad, Maharashtra 402309



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1. PROJECT BACKGROUND

VN Creative Chemicals Private Limited formerly known as Vasundhara Rasayans Limited is a leading manufacturer and exporter of Antacids therapeutic category of Active Pharma Ingredients with annual capacity of about 1500 MT of powder or its equivalent products.

It started its operation in the year 1990 with an Antacid API facility offering product is paste, powder and micronized grade of powder. The plant is located on National Highway between Mumbai and Goa in an Industrial Zone called Mahad, which is about 170 KMS from Mumbai and about 125 KMS from the NSCI/JNPT Ports Mumbai.

In addition to the API manufacturing Vasundhara is also having an API intermediate plant to handle organic products with its state –of the –art specialized Friedel Craft reaction facility.

VNCCPL manufactures organic products in paste, powder and micronized grade powder which is been successfully used to make liquid antacid formulations in place of conventional paste form of the products. The industry is operating at plot No.C-104, MIDC Mahad, District: Raigad-402309. Industry was in the business of inorganic chemical manufacturing, which does not require EC. In the year 2011 industry has decided to manufacture Iso-Butyl Aceto Phenone and it is organic chemical. Hence, in accordance with the EIA Notification 14th September 2006 and amendment thereof, the company has obtained Environmental Clearance from State Level Expert Appraisal Committee (SEIAA) vide letter No. SEAC 2011/CR-511/TC-2 dated 30th June 2012. **(Annexure:1-Copy of EC letter)**. Further, after change in name of industry was obtained change in name in EC from Vasundhara Rasayans Limited to the VN Creative Chemicals Private Limited **(Annexure:2-Change in Name letter)**. For EC product, i.e. Iso-Butyl Aceto Phenone, industry was obtained CTE from State Pollution Control Board vide consent No.BO/RO-Raigad/RO(P&P)/EIC-RD-1625-10/E/CC38 dated 04/03/2011. **(Annexure:3-1st CTE copy of organic product)** and CTO vide consent No. BO/AST/EIC.No.-RD-2624-14/Amalgamation/Gen-5824 dated 19/06/2014. **(Annexure:4-1st CTO as per EC)**. CTO was later on amended under product mix for manufacturing two new additional product viz. Magaldrate and Sucralfate vide consent order No. BO/MPCB/AST/EIC.No.-RD-3016-15/A/Gen-4541 dated 01/04/2016. **(Annexure:5-CTO copy under product mix)**. In the year 2018, industry was again obtained amendment in CTO under product mix for manufacturing of new products vide consent order No. format 1.0/BO/AST/UAN No.0000032995/0-1810001495 dated 26/10/2018 and valid till 30/10/2023. **(Annexure:6- valid CTO for existing unit)**.

The industry has acquired total area of 14000 m² within the Mahad MIDC area.

Since the site is located in MIDC area with all the infrastructural requirements such as roads, electricity and water are supplied by MIDC.



2. INFORMATION SHEET

Monitoring the Implementation of Environmental Safeguards Ministry of Environment & Forest

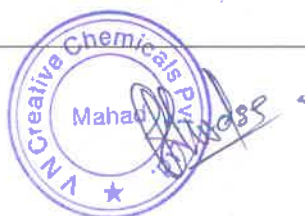
Western Region, Regional Office, Nagpur

MONITORING REPORT

PART – I

DATA SHEET

Sl. No.	Particulars		Details		
1.	Project type:	:	Industry		
2.	Name of the Project	:	Production of Iso Butyl Acetophenone		
3.	Clearance letter (s) / OM No. and date	:	SEAC-2011/CR.511/TC-2 dated 30 th June,2012.		
4.	Location	:	Raigad.		
	a) District (s)	:			
	b) State (s)	:	Maharashtra		
	c) Location latitude / longitude	:	Point	Latitude	Longitude
			A	18°6'26.53"N	73°28'59.99"E
			B	18°6'26.61"N	73°29'5.09"E
			C	18°6'26.42"N	73°29'0.32"E
			D	18°6'26.60"N	73°29'5.09"E
5.	Address for Correspondence	:	Sanjeev Godse, Authorized Signatory,		
	a) Address of the Concerned Project Chief Engineer (with Pin code & Telephone / Telex / Fax Numbers)	:	C/o S H Kelkar & Company Limited, LBS Marg, Mulund-West. Mumbai-400080. Tel-9604699906. Fax-022-21649766.		
	b) Address of the Concerned Project Engineer / Manager (with Pin code & Telephone / Telex / Fax Numbers)	:	Sanjeev Godse, Authorized Signatory, C/o S H Kelkar & Company Limited, LBS Marg, Mulund-West. Mumbai-400080. Tel-9168448726 Fax-022-21649766. e-mail: vncccpl.mahad@keva.co.in .		
6.	Salient features	:	Project Spectrum	Synthetic organic chemicals industry.	
	a) of the Project	:	Total Plot Area	14,000.00 sq. m.	



Project Resident Population size	Floating population of individual tenant approx.	
	As per EC/CTO	Present Scenario
Direct Employment	80	80
Water Demand	30 CMD Organic Unit Total Water-238 CMD.	30 CMD-Organic Unit Total Water-238 CMD.
Source of Water	MIDC	MIDC
Waste Water Generation	205 CMD	205 CMD
Sewage Treatment Plant (STP)	Treated in septic tank followed by soak pit.	Treated in septic tank followed by soak pit.
Effluent Treatment Plant (ETP)	225 CMD	225 CMD
Common Effluent Treatment Plant (CETP)	Out of 205 CMD of treated effluent 91 CMD of effluent is being recycled in the process and remaining 114 CMD shall be discharged into CETP for further treatment and disposal.	
Non-Hazardous Solid Waste generation	As per EC/CTO	Present Scenario
	Steel Scrap- 10 MT/M	Steel Scrap- 1.736 MT/M
	Wooden Scrap- 10 MT/M	Wooden Scrap- 0.00 MT/M
	Plastic Scrap- 10 MT/M	Plastic Scrap- 0.04 MT/M
Industrial Solid Waste generated		
Waste	As per EC/CTO	Present Scenario
28.1 Residue and Waste	250 Kg/D	0.00 Kg/day
34.3 ETP Sludge	200 kg/D	25.0 Kg/Day
20.2 Spent Solvent	3.75 MT/M	0.00 MT/M
33.1 Discarded Containers/Barrels	7500 Nos/M	83 Nos/M
34.2 MEE Salt	4.9 MT/D	0.331 MT/D
Power requirement	350 KVA	
Cost of the Project	As per EC	Present Scenario
	Rs 11.42 Cr	Rs 17.30 Cr
b) of the Environmental Management Plans		



Environmental and Social Monitoring –

Waste Water Treatment Plant

Industry is being categorized waste water as sewage & effluent. Total sewage generated from domestic activity is collected in septic tank and septic tank overflow will mixed with industrial effluent which will be primary treated in ETP of capacity 225 CMD. Out of 205 CMD of treated effluent 91 CMD shall be recycle/ reuse in the process and remaining 114 CMD is being discharged into CETP for further treatment & disposal by achieving consent standards.

Air Pollution

Stacks attached to boiler, DG set are the main air pollution source. Following measures are adopted within the industry

Sr.No.	Stack attached to	APC System	Height in Mtrs	Type of Fuel	Quantity & UoM	SO2 Kg/Day
01	Boiler (6.3 TPH)	Stack	30	LSHS	1700 Kg/Day	153
02	Thermopac (10 Lac kcal/hr)	Stack	35	LSHS	119 kg/Hr	257.04
03	Spray Dryer	Stack	20	LSHS	75 kg/Hr	162
04	DG Set-I (500 KVA)	Acoustic Enclosure	11	HSD	112 Lit/Hr	53.76
05	DG Set-II (500 KVA)	Acoustic Enclosure	11	HSD	112 Lit/Hr	53.76
06	Scrubber for HCL Recovery C-501A	Scrubber	2.5	--	--	--
07	Scrubber for HCL Recovery C-501B	Scrubber	3	--	--	--
08	Scrubber for HCL Recovery C-501A	Scrubber	3	--	--	--

Waste Management

Hazardous Waste Generation & Disposal

Category	Waste	Qty	Treatment/Disposal
28.1	Residue and Waste	250 Kg/Day	CHWTSDF
34.3	ETP Sludge	200 Kg/Day	CHWTSDF
20.2	Spent Solvent	3.75 MT/M	Sale to Authorized Party
33.1	Discarded Containers/Barrels	7500 Nos/M	Sale to Authorized Party
34.2	MEE Salt	4.9 MT/D	Sale to Authorized Party/ Recycle/CHWTSDF



Non-Hazardous Waste Generation & Disposal				
Sr.No.	Type of Solid Waste	Quantity	UoM	Disposal
01	Steel Scrap	10.00	MT/M	Sale to Authorized Party
02	Wooden Scrap	10.00	MT/M	
03	Plastic Scrap	10.00	MT/M	
Corporate Social Responsibility –				
7.	Breakup of the Project Area a) Submergence area: forest & non forest b) Others	:	NA There is no forest are involved. Total Plot Area:14,000.00 Sq. Meter Total BUA: 1996 Sq. M.	
8.	Breakup of the project affected population with the enumeration of those losing Houses / Dwelling units only, Agricultural Land & Landless Laborers / Artisans: a) SC, ST / Adivasi b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey)	:	Not Applicable	
9 a)	Financial Details: Project cost as originally planned and subsequent revised estimates and the year of price reference	:	Existing -7.84 Cr, Proposed –Rs. 3.44 Cr. Total-Rs. 11.28 Cr. Revised total estimate of the project is in Rs 17.30 Cr.	
b)	Allocation made for environmental management plans with item wise and year wise breakup	:	Capital Investment — Rs.5 Cr O & M Cost — Rs. 3.79 Cr/ Annum	
c)	Benefit cost ratio/Internal rate of Return and the year of assessment	:	-	
d)	Whether includes the cost of environmental management as shown in the above	:	Yes	
e)	Actual expenditure incurred on the project so far	:	Revised total estimate of the project is Rs.17.30	



f)	Actual expenditure incurred on the environmental management plans so far	:	Capital Investment — Rs.5.2 Cr
10	Forest Land Requirement		No Forest land is involved in the project.
a)	The status of approval for diversion of forest land for non-forestry use	:	NA
b)	The status of clearing felling	:	NA
c)	The status of compensatory afforestation, if any	:	NA
d)	Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	NA
11	The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads.), if any with quantitative information required.	:	NA
12	Status of construction (Actual & /or planned)	:	Industry is in operational state as per schedule.
a)	Date of commencement (Actual & / or planned)	:	Actual : 02/07/2012
b)	Date of completion (Actual &/or planned)	:	Actual : 30/05/2014
13	Reasons for the delay if the project is yet to start	:	NA
14	Dates of Site Visits		
a)	The dates on which the project was monitored by the Regional Office on previous occasions, if any	:	--
b)	Date of site visits for this monitoring report	:	--

FOR VN CREATIVE CHEMICALS PVT LTD



AUTHORIZED SIGNATORY



CONDITION -WISE COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE

EC Order No.: F. No SEAC-2011/CR.511/TC-2 dated March 30th June ,2012
Amendment in EC Letter : SEIAA-2019/CR-62/SEIAA Dated 25.04.2019

Sr.No.	Conditions	Status of Compliance along with details
<u>General Conditions.</u>		
i.	As the project is located at Mahad MIDC , Hon High Court/ CPCB directions particularly CETP and zero Liquid Discharge etc Prevailing if any should be complied while issuing consents for application and operate.	As per valid CTO Out of 205 CMD of treated effluent 91 CMD shall be recycle/ reuse in the process and remaining 114 CMD is being discharged into CETP for further treatment & disposal by achieving consent standards. Industry is having valid CETP discharge consent. Annexure 7- MAHAD CETP Membership
ii.	No Land Development/ Construction Work Preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities	Construction of project was stated after getting environmental clearance and consent from Maharashtra pollution control board i.e. 07/02/2012.
iii.	No additional land shall be used/required for any activity of the project without obtaining proper permission.	Noted. Existing land of 14000 Sq.Mt. is adequate for existing activity. Industry has planned expansion hence applied for additional land of 10000 sq.mt to the MIDC.
iv.	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	It is already been compiled during construction phase



SPECIFIC CONDITIONS		
v.	Regular monitoring of air quality, Including SPM and SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and the records shall be maintained. The location of monitoring stations and the frequency of monitoring shall be decided in consultation with MPCB and submit report accordingly to MPCB.	Noted. Air quality monitoring reports are attached as an Annexure-8
vi.	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area	There is no furnace requirement. Industry is having 6.3 TPH furnace oil fired boiler. For proper combustion of fuel ID fan is provided to the boiler.
vii.	Proper housekeeping programs shall be implemented.	Noted. SOPS are defined for proper housekeeping. Daily log-sheets are maintained for housekeeping. All raw material as well as finished goods are stacked at designated area only.
viii.	In event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of use and shall not be restarted until the desired efficiency is achieved.	For failure and risk of operation HIRA system is designed and operation of the plant is being carried as per standard SOPS and HIRA.
ix.	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).	11 meter stack height is provided to DG sets.
x.	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	6 Recharge pits are constructed within plant premises for Rainwater Harvesting
xi.	Arrangement shall be made that effluent and storm water does not get mixed.	Separate effluent & storm water network is designed. Effluent is being treated in 225 CMD of ETP.
xii.	Periodic monitoring of ground water shall be undertaken and result analyzed to ascertain any change in the quality of water. Result shall be regularly submitted to the Maharashtra pollution control Board.	There is no abstraction or use of Ground water. Out of 205 CMD of treated effluent 91 CMD shall be recycle/ reuse in the process and remaining 114 CMD is being discharged into CETP for further treatment & disposal by achieving consent standards.



xiii.	Noise level shall be maintained as per Standards. For the people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	There is no high noise prone area. Work zone noise is being monitored through spot noise level meter. Workers working around Reactor and CT area PPE's will provided.
xiv.	The overall noise level in and around the plant are shall be kept well within the standards by providing the noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation . The ambient noise level shall confirm to the standards prescribed. Under Environment (Protection) Act, 1986 Rules, 1989.	The ambient noise level within plant premises and around the industry is found within the permissible limits.
xv.	Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Department.	As per MIDC DCR open area i.e.10% of the plot area is being converted into green belt. Within green area of 1400 Sq. Mt. 140 nos. of trees are planted.
xvi.	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	Assembly points are defined and marked within plant premises in case of emergency. In addition to that alarm system and sensors are placed at working area to avoid catastrophic accident.
xvii.	Occupational health surveillance of the worker shall be done on a regular basis and record maintained as per Factories Act.	Health checkup for all workers are carried out as per schedule of company, in the month of November every year, As per compliance with Factory Act.
xviii.	The company shall make arrangement for protection of possible fire hazards during manufacturing process in the material handling.	Fire hazard control system is designed as per NAFA and detailed study is already being done. HIRA is designed and place as per SOP's. Annexure-9: HIRA of the operation process.
xix.	The project Authorities must strictly comply with the rules and regulation with regard to handling and disposal of hazardous wastes in accordance with the Hazardous wastes (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collection /treatment/ storages/ disposal of hazardous wastes.	Industry is complying Hazardous wastes (Management and Handling) Rules, 2003 (amended). All generated Hazardous waste must dispose off through CHWTSDF & Authorized Vendor.



	Category	Waste	Qty	Treatment /Disposal
	28.1	Residue and Waste	250 Kg/Day	CHWTSDF
	34.3	ETP Sludge	200 Kg/Day	CHWTSDF
	20.2	Spent Solvent	3.75 MT/M	Sale to Authorized Party
	33.1	Discarded Containers/ Barrels	7500 Nos./M	Sale to Authorized Party
	34.2	MEE Salt	4.9 MT/D	Sale to Authorized Party/ Recycle/CHWTSDF
XX.	The company shall undertake following waste Minimization Measures:			
	➤ Meeting of the quantities of active ingredients to minimize the waste.			
	➤ Reuse of by-products from the process as raw materials or as raw material substitutes in the other process.		By-product is having good economic value hence it is directly sale into the market. Other end users used by-product as raw material	
	➤ Maximizing Recoveries.		Solvent is recycle and reuse Annexure 10- Solvent Recovery Details	
	➤ Use of automated material transfer system to minimize spillage.		Solvent and high volatile raw material are fed with automatic controller.	
Xxi	Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes/improvements required. If any, in the on-site management plan shall be ensured		Noted and complying. Regular mock drills for on-site emergency preparedness is being carried out.	
Xxii	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.		Environmental Management Cell is established and it is operational under head of company MD It is under operational of Sanjeev Godse , Unit Head. Annexure 11- EHS Cell.	
Xxiii	Separate fund shall be allocated for Implementation of environmental protection measures / EMP along with item-wise breaks-up. These cost shall be included as part of the project cost .The funds earmarked for the environment for the environment protection measures shall not be diverted for the other purposes and year wise expenditure should reported to the MPCB & this department.		Annexure 12- Year wise EMP Budget	



Xxiv	The project management shall advertise at least in two local newspaper widely circulated in the region around the project, one of which shall be in the Marathi language on the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov	
Xxv	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and condition in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.	Noted for compliance.
Xxvi	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestion/representation, if any were received processing the proposal. The clearance letter shall be also be put on the website of the company by the proponent.	Noted
Xxvii	The proponent shall upload the status of compliance of the stipulated EC condition, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant level namely; SPM, RSPM, SO ₂ , NO _x (ambient level as well as stack emission) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Noted for compliance Annexure 8- Ambient Air Quality Reports Annexure 13-Stack Monitoring Reports Annexure 14- ETP Treated Water Analysis Reports
Xxviii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC condition including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB	Noted for compliance
Xxix	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as Prescribed under the	Annexure 15- FORM-V for FY 2021-22.



	environment (protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of the compliance of EC condition and shall also be sent to the respective Regional Offices of MoEF by e-mail.	
4	The environmental clearance is being issued without prejudice to the action initiated under EP act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP act.	Noted & Agreed.
5	The environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.	Noted.
6	Validity of Environmental Clearance: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.	Noted. Industry construction was started dated 02/07/2012 and completed dated 30/05/2014. Industry obtained CTO from MPCB dated 19/06/2014.
7	In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.	Noted.
8	The above stipulations would be enforced among others under the water (prevention and control of pollution) act, 1974, the air (prevention and control of pollution) act, 1981. The environment (protection) act, 1986 and rules there under, hazardous wastes (management and handling) rules, 1986 and its	Noted.



	amendments, the public liability insurance act, 1991 and its amendments.	
9	Any appeal against this environmental clearance shall lie with the National Green Tribunal, Van Vigyan Bhawan, Sec-5, R.K. Puram, New Delhi — 110022, if preferred, within 30 days as prescribed under section 35 of the National Green Tribunal Act 2010.	Noted.



ULR NO: TC515023000013194F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergenies Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/58/ VCCPL/ AAM (22-23-786A)

REPORT DATE : 07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : AAM (22-23-786A)
 SAMPLING PLAN& METHOD NO.: As per Reference Method
 SAMPLING DATE : 30/03/2022 to 31/03/2023
 SAMPLING TIME : 11:30 AM
 ANALYSIS START DATE : 01/04/2023
 ANALYSIS COMPLETE DATE : 07/04/2023

AMBIENT AIR QUALITY MONITORING

LOCATION :Near Main Gate

SAMPLING DURATION: 24 HRS

SAMPLE COLLECTED BY: SKYLAB

AMBIENT TEMPRATURE:16°C TO 33°C

HUMIDITY :47 % TO 75 %

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Particulate Matter as PM10	µg/m³	82.1	100	IS:5182, (Part - 23)
2.	Particulate Matter as PM2.5	µg/m³	44.1	60	IS:5182, (Part 24)
3.	Sulphur Dioxide (SO2)	µg/m³	22.4	80	IS:5182, (Part - 2)
4.	Nitrogen Oxide (NOx)	µg/m³	39.7	80	IS: 5182, (Part - 6)
5.	Ozone (O3)	µg/m³	<20	180	Method 411, Methods of Air Sampling and Analysis, 3rd Edition
6.	Carbon Monoxide (CO) Duration of Sampling 8 hr	mg/m³	0.48	2 for 8 hrs	IS 5182 (Part 10)
7.	Carbon Monoxide (CO)	ppm	0.38	NS	IS 5182 (Part 10)
8.	Ammonia (NH3)	µg/m³	26.6	400	Method 401, Methods of Air Sampling and Analysis, 3rd Edition
9.	Benzene (C6H6)	µg/m³	<0.1	5	IS 5182 (Part 11)
10.	Benzo(a)pyrene	ng /m³	<1	1	IS 5182 (Part 12)
11.	Metal-Lead	µg/m³	<0.1	1	Method 822, Methods of Air Sampling and Analysis, 3rd Edition
12.	Metal-Arsenic	ng /m³	<1	6	Method 302, Methods of Air Sampling and Analysis, 3rd Edition
13.	Metal-Nickel	ng /m³	<0.5	20	Method 822, Methods of Air Sampling and Analysis, 3rd Edition

[#]: As per NAAQMS Guidelines 2009. NS: Not Specified.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Technical Manager

Authorized Signatory

END OF REPORT

1. This report reflects findings only for the above sample tested/monitored and only for time and place of monitoring/testing.
2. This report is confidential & cannot be re-produced in part or full without permission of SKYLAB Analytical Laboratory.
3. Any attempt of forgery or misleading use of this report by any person/organization etc will attract suitable legal action against them by SkyLab Analytical Laboratory.



TC 5150

Accredited by NABL as per ISO/IEC 17025:2017, Certified as ISO 9001:2015 & ISO 45001:2018

Recognized by MoEFCC, Govt. of India, valid till 08.12.2023

Add.: 202, CFC - 3, Asmeeta Texpa, Addl. Kalyan - Bhiwandi Industrial Area, MIDC, Village Kon, Tal. Bhiwandi,
 Dist. Thane, Maharashtra, INDIA, Pincode - 421311

Mob. No. - 9867577309 / 310 / 312 / 9930060058

Email - mails@skylabenviro.com Website - www.skylabenviro.com

SALAC2322020614762

ULR NO: TC515023000013195F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO : SAL/FM/58/VCCPL/AAM(22-23-786B)

REPORT DATE : 07/04/2023

CUSTOMER REF : 4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : AAM (22-23-786B)

SAMPLING PLAN & METHOD NO.: As per Reference Method

SAMPLING DATE : 30/03/2022 to 31/03/2023

SAMPLING TIME : 11:45 AM

ANALYSIS START DATE : 01/04/2023

ANALYSIS COMPLETE DATE : 07/04/2023

AMBIENT AIR QUALITY MONITORING

LOCATION : Near Pump House

SAMPLING DURATION : 24 HRS

SAMPLE COLLECTED BY : SKYLAB

AMBIENT TEMPERATURE: 16°C TO 33°C

HUMIDITY : 47 % TO 75 %

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Particulate Matter as PM10	µg/m ³	68.5	100	IS:5182, (Part - 23)
2.	Particulate Matter as PM2.5	µg/m ³	35.9	60	IS:5182, (Part 24)
3.	Sulphur Dioxide (SO ₂)	µg/m ³	16.4	80	IS:5182, (Part - 2)
4.	Nitrogen Oxide (NO _x)	µg/m ³	31.8	80	IS: 5182, (Part - 6)
5.	Ozone (O ₃)	µg/m ³	<20	180	Method 411, Methods of Air Sampling and Analysis, 3rd Edition
6.	Carbon Monoxide (CO) Duration of Sampling 8 hr	mg/m ³	0.39	2 for 8 hrs	IS 5182 (Part 10)
7.	Carbon Monoxide (CO)	ppm	0.31	NS	IS 5182 (Part 10)
8.	Ammonia (NH ₃)	µg/m ³	25.2	400	Method 401, Methods of Air Sampling and Analysis, 3rd Edition
9.	Benzene (C ₆ H ₆)	µg/m ³	<0.1	5	IS 5182 (Part 11)
10.	Benzo(a)pyrene	ng /m ³	<1	1	IS 5182 (Part 12)
11.	Metal-Lead	µg/m ³	<0.1	1	Method 822, Methods of Air Sampling and Analysis, 3rd Edition
12.	Metal-Arsenic	ng /m ³	<1	6	Method 302, Methods of Air Sampling and Analysis, 3rd Edition
13.	Metal-Nickel	ng /m ³	<0.5	20	Method 822, Methods of Air Sampling and Analysis, 3rd Edition

[#]: As per NAAQMS Guidelines 2009. NS: Not Specified.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Handwritten Signature
 Technical Manager
 Authorized Signatory

END OF REPORT

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HAZOP STUDY REPORT

OF

**MUSK PROJECT ,
MAHAD, MAHARASHTRA**

FOR

PREPARED BY

**ASIA PACIFIC RISK MANAGEMENT SERVICES
PVT. LTD.**

www.aprms.com

0	25 JULY 2017	BV	KNS		FOR REVIEW / COMMENT
REV.	DATE	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
THIS DOCUMENT IS INTENDED FOR USE BY SHROFF ENGINEERING LIMITED AND ITS NOMINATED CONSULTANTS, CONTRACTORS, MANUFACTURERS AND SUPPLIERS.					
Report. No: RPT- 603/KEVA-MUSK/APRMS/2017-18/R0				Rev. 0	25 JULY 2017



HAZOP STUDY FOR MUSK PROJECT



Report. No: RPT- 603/KEVA-MUSK/APRMS/2017-18/R0

25 JULY 2017

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Disclaimer

This report has been prepared by Asia Pacific Risk Management Services Private Limited with all reasonable skill, care and diligence within the terms of the contract with Shroff Engineering Ltd, incorporating our general terms and condition of business and taking account of resources devoted to it by agreement with Shroff Engineering Ltd. The material in it reflects APRMS' best judgement in light of the information available to it at the time of preparation. We disclaim any responsibility to Shroff Engineering Ltd in respect of any matters outside the scope of the above. This report is confidential and we accept no responsibility of whatsoever nature of third parties to whom this report or any part thereof is made known any such party relies on the report at their own risk. Moreover, this report does not guarantee, assure or warrant in any way that Shroff Engineering Ltd is in compliance with laws, statues, regulations or directives or that compliance with the recommendations of this report will eliminate all hazards or accidents or operability problems.

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HAZOP STUDY FOR MUSK PROJECT



Report. No: RPT- 603/KEVA-MUSK/APRMS/2017-18/R0

25 JULY 2017

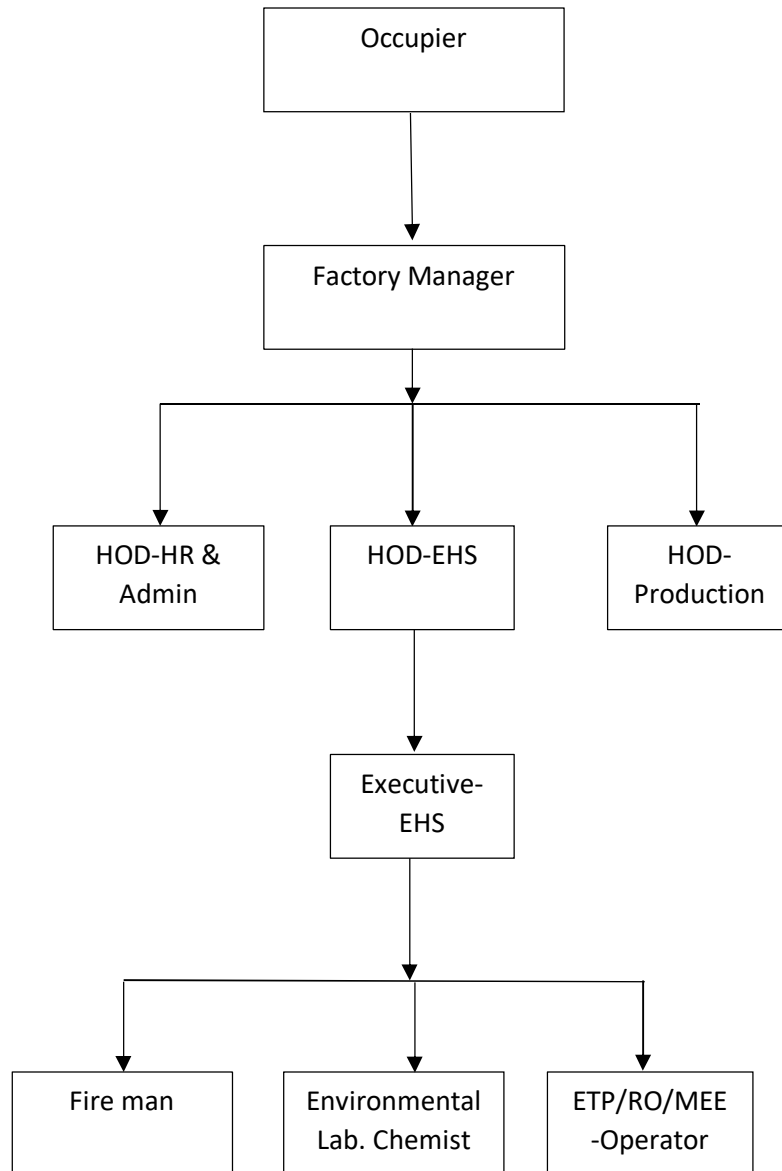
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ANNEXURE-11

VN CREATIVE CHEMICALS PRIVATE LIMITED, MAHAD

EHS CELL



Annexure - 12

VN CREATIVE CHEMICALS PRIVATE LIMITED, MAHAD

Details of Expenses for Environment Protection

Sr. No.	Description	Yr-2018-2019	Yr-2019-2020	Yr-2020-2021	Yr-2021-2022	Yr-2022-2023
01	Expenses for ETP Operation	0	12.83	14.74	20.00	15.35
02	Expenses for RO & MEE Plant Operation	0	143.00	184.70	349.51	264.81
03	Expenses for Environmental Lab Operation	0	2.33	0.92	0.62	0.96
04	Expenses for Environment Monitoring	0	2.03	0.92	1.66	1.73
05	Expenses for Hazardous Waste Management	0	41.71	36.95	45.45	17.39
06	Celebration of Environment Day	0	0.05	0.05	0.05	0.05
07	Expenses for new equipment (RO and MEE Plant)	200.00	0	12.00	0	35.29
Total Expenses in Lakh		200.00	201.95	250.28	417.29	335.57

ULR NO: TC515023000013196F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO : SAL/FM/58/ VCCPL/ BSM (22-23-299A)

REPORT DATE : 07/04/2023

CUSTOMER REF : 4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : BSM (22-23-299A)
 SAMPLING PLAN & METHOD NO. : As per Reference Method
 SAMPLING DATE : 30/03/2023
 SAMPLING TIME : 12:20PM
 ANALYSIS START DATE : 01/04/2023
 ANALYSIS COMPLETE DATE : 07/04/2023

BOILER STACK EMISSION MONITORING

LOCATION : Boiler Stack(6.3 TPH)
 SAMPLE COLLECTED BY : SKYLAB
 STACK HEIGHT : 30Meters
 SHAPE OF STACK : Round
 MATERIAL OF STACK : MS
 FUEL USED (CONSUMPTION) : LSHS (1700Kg/day)

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Dimensions of Stack	m	1.2	NA	-
2.	Cross section area of Stack	m ²	1.131	NA	-
3.	Temperature	°C	115	NA	IS 11255 (Part 1)
4.	Velocity	m/s	7.8	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	24399.1	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	53.1	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO ₂)	mg/Nm ³	24.6	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO ₂)	Kg/Day	14.41	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO _x)	mg/Nm ³	45.1	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO _x)	ppm	21.96	NS	IS 11255 (Part 7)

NS: Not Specified. NA: Not Applicable. #: As per MPCB Consent.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB consent.

Verified by



Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY



Technical Manager
 Authorized Signatory

END OF REPORT

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 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309.

REPORT NO : SAL/FM/59/VCCPL/DGSM(22-23-890A)

REPORT DATE : 07/04/2023

CUSTOMER REF : 4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : DGSM (22-23-890A)

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE : 30/03/2023

SAMPLING TIME : 12:00PM

ANALYSIS START DATE : 01/04/2023

ANALYSIS COMPLETE DATE : 07/04/2023

DG STACK EMISSION MONITORING

LOCATION : D. G. Stack 1 (500 kVA)

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 11 Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : MS

FUEL USED (CONSUMPTION) : HSD (112 Lit/hr)

Sr. No.	Test Parameter	Unit	Result	Limit#	Reference Method
1.	Dimensions of Stack	m	0.4	NA	-
2.	Cross section area of Stack	m ²	0.126	NA	-
3.	Temperature	°C	114	NA	IS 11255 (Part 1)
4.	Velocity	m/s	8.1	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	2808.6	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	57.5	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO ₂)	mg/Nm ³	65.6	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO ₂)	Kg/Day	4.43	53.76	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO _x)	mg/Nm ³	74	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO _x)	ppm	36.0	50	IS 11255 (Part 7)
11.	Carbon Monoxide (CO)	mg/Nm ³	86.5	NS	EPA Method 10

NS: Not Specified. NA: Not Applicable. #: As per MPCB Consent.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Technical Manager
 Authorized Signatory

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REPORT DATE : 07/04/2023

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REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : DGSM (22-23-890A)
 SAMPLING PLAN & METHOD NO. : As per Reference Method
 SAMPLING DATE : 30/03/2023
 SAMPLING TIME : 12:00PM
 ANALYSIS START DATE : 01/04/2023
 ANALYSIS COMPLETE DATE : 07/04/2023

DG STACK EMISSION MONITORING

LOCATION : D. G. Stack 1 (500 kVA)
 SAMPLE COLLECTED BY : SKYLAB
 STACK HEIGHT FROM GL : 11 Meters
 SHAPE OF STACK : Round
 MATERIAL OF STACK : MS
 FUEL USED (CONSUMPTION) : HSD (112 Lit/hr)

Sr. No.	Test Parameter	Unit	Result	Limit#	Reference Method
1.	Hydrocarbon (HC)	mg/Nm ³	56.1	NS	Instrumental

NS: Not Specified. NA: Not Applicable. #: As per MPCB Consent.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Technical Manager
 Authorized Signatory

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ULR NO: TC515023000013198F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309.

REPORT NO : SAL/FM/59/VCCPL/DGSM(22-23-890B)

REPORT DATE : 07/04/2023

CUSTOMER REF : 4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : DGSM (22-23-890B)
 SAMPLING PLAN & METHOD NO. : As per Reference Method
 SAMPLING DATE : 30/03/2023
 SAMPLING TIME : 12:10PM
 ANALYSIS START DATE : 01/04/2023
 ANALYSIS COMPLETE DATE : 07/04/2023

DG STACK EMISSION MONITORING

LOCATION : D.G. Stack-2 (500 kVA)
 SAMPLE COLLECTED BY : SKYLAB
 STACK HEIGHT FROM GL : 11 Meters
 SHAPE OF STACK : Round
 MATERIAL OF STACK : MS
 FUEL USED (CONSUMPTION) : HSD (112 Lit/hr)

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Dimensions of Stack	m	0.4	NA	-
2.	Cross section area of Stack	m ²	0.126	NA	-
3.	Temperature	°C	115	NA	IS 11255 (Part 1)
4.	Velocity	m/s	7.8	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	2711.0	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	54.4	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO ₂)	mg/Nm ³	61.5	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO ₂)	Kg/Day	4.0	53.76	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO _x)	mg/Nm ³	78.1	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO _x)	ppm	38	50	IS 11255 (Part 7)
11.	Carbon Monoxide (CO)	mg/Nm ³	93.4	NS	EPA Method 10

NS: Not Specified. NA: Not Applicable. #: As per MPCB Consent.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

[Signature]
 Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

[Signature]
 Technical Manager
 Authorized Signatory

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TEST REPORT

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M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309.

REPORT NO : SAL/FM/59/VCCPL/DGSM(22-23-890B)

REPORT DATE : 07/04/2023

CUSTOMER REF : 4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : DGSM (22-23-890B)
 SAMPLING PLAN & METHOD NO. : As per Reference Method
 SAMPLING DATE : 30/03/2023
 SAMPLING TIME : 12:10PM
 ANALYSIS START DATE : 01/04/2023
 ANALYSIS COMPLETE DATE : 07/04/2023

DG STACK EMISSION MONITORING

LOCATION : D.G. Stack-2 (500 kVA)
 SAMPLE COLLECTED BY : SKYLAB
 STACK HEIGHT FROM GL : 11 Meters
 SHAPE OF STACK : Round
 MATERIAL OF STACK : MS
 FUEL USED (CONSUMPTION) : HSD (112 Lit/hr)

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1.	Hydrocarbon (HC)	mg/Nm ³	58.4	NS	Instrumental

NS: Not Specified. NA: Not Applicable. *: As per MPCB Consent.

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

[Signature]
 Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

[Signature]
 Technical Manager
 Authorized Signatory

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ULR NO: TC515023000013201F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to Lass
 Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309.

REPORT NO :SAL/FM/59/VCCPL/SM(22-23-299B)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SM (22-23-299B)

SAMPLING PLAN & METHOD NO. :As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :12:30PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

STACK EMISSION MONITORING

LOCATION :TFH Heater (10 Lac kcal/hr)

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL :35Meters

SHAPE OF STACK& STACK TOP : Round

MATERIAL OF STACK :MS

FUEL USED (CONSUMPTION) :LSHS (119 Kg/Hr.)

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Diameter of Stack	m	1.5	NA	-
2.	Cross section area of Stack	m ²	1.767	NA	-
3.	Temperature	°C	133	NA	IS 11255 (Part 1)
4.	Velocity	m/s	6.2	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	29095.3	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	51.8	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO ₂)	mg/Nm ³	28.7	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO ₂)	Kg/Day	20.05	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO _x) -	mg/Nm ³	41	NS	IS 11255, (Part 7)
10.	Nitrogen Oxide (NO _x)	ppm	19.96	NS	IS 11255, (Part 7)

NA: Not Applicable. NS: Not Specified. #: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

Sr. Analyst

For SKYLAB ANALYTICAL LABORATORY



Handwritten signature

Technical Manager
 Authorized Signatory

END OF REPORT

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ULR NO: TC515023000013202F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.

C-104, MIDC Mahad, Behind MIDC Fire Station, Next to Lass Supergeneries Ltd. Unit-1, Mahad, Maharashtra 402309.

REPORT NO :SAL/FM/59/VCCPL/SM(22-23-299C)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : SM(22-23-299C)

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :12:40PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

STACK EMISSION MONITORING

LOCATION :Spray dryer

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 20 Meters

SHAPE OF STACK & STACK TOP : Round

MATERIAL OF STACK :MS

FUEL USED (CONSUMPTION) : LSHS(75 Lit/Hr.)

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1.	Diameter of Stack	m	0.5	NA	-
2.	Cross section area of Stack	m ²	0.196	NA	-
3.	Temperature	°C	130	NA	IS 11255 (Part 1)
4.	Velocity	m/s	5.8	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	3043.8	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	52.0	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO ₂)	mg/Nm ³	45.1	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO ₂)	Kg/Day	3.30	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO _x)	mg/Nm ³	36	NS	IS 11255, (Part 7)
10.	Nitrogen Oxide (NO _x)	ppm	17.5	NS	IS 11255, (Part 7)

NA: Not Applicable. NS: Not Specified.*: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per MPCB Consent.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Technical Manager
 Authorized Signatory

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ULR NO: TC515023000013203F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531A)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SSM(22-23-531A)

SCRUBBER STACK EMISSION MONITORING

LOCATION : Vent Scrubber for HCL
 recovery C-502

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :12:50PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 3Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : PVDF- FRP

FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1.	Dimensions of Stack	m	0.3	NA	-
2.	C/s area of Stack	m ²	0.071	NA	-
3.	Temperature	°C	39	NA	IS 11255 (Part 1)
4.	Velocity	m/s	4.76	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	1157.3	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	16.4	150	IS 11255 (Part 1)

NA: Not Applicable. *: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by


Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY


 Technical Manager
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 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531A)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE :08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SSM(22-23-531A)

SCRUBBER STACK EMISSION MONITORING

LOCATION : Vent Scrubber for HCL
 recovery C-502

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :12:50PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 3Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : PVDF- FRP

FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit#	Reference Method
1.	Hydrogen Chloride (HCl)	ppm	5.8	35	EPA method 26a

NA: Not Applicable. #: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by

Sr. Analyst

For SKYLAB ANALYTICAL LABORATORY



Handwritten Signature

Technical Manager

Authorized Signatory

END OF REPORT

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ULR NO: TC515023000013204F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531B)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SSM(22-23-531B)

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :01:00PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

SCRUBBER STACK EMISSION MONITORING

LOCATION : Scrubber for HCL,C501A

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 2.5Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : PVDF- FRP

FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit [#]	Reference Method
1.	Dimensions of Stack	m	0.4	NA	-
2.	C/s area of Stack	m ²	0.126	NA	-
3.	Temperature	°C	38	NA	IS 11255 (Part 1)
4.	Velocity	m/s	3.6	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	881.9	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	13.7	150	IS 11255 (Part 1)

NA: Not Applicable. #: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

Technical Manager

Authorized Signatory

END OF REPORT

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TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531B)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SSM(22-23-531B)

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :01:00PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

SCRUBBER STACK EMISSION MONITORING

LOCATION : Scrubber for HCL C501A

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 2.5Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : PVDF- FRP

FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter.	Unit	Result	Limit#	Reference Method
1.	Hydrogen Chloride (HCl)	ppm	4.5	35	EPA method 26a

NA: Not Applicable. #: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by



Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY



Technical Manager
 Authorized Signatory

END OF REPORT

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ULR NO: TC515023000013205F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531C)

REPORT DATE :07/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. :SSM(22-23-531C)

SCRUBBER STACK EMISSION MONITORING

LOCATION : Caustic Scrubber for HCL
 recovery C 501B

SAMPLING PLAN & METHOD NO. : As per Reference Method

SAMPLING DATE :30/03/2023

SAMPLING TIME :01:10PM

ANALYSIS START DATE :01/04/2023

ANALYSIS COMPLETE DATE :07/04/2023

SAMPLE COLLECTED BY : SKYLAB

STACK HEIGHT FROM GL : 3Meters

SHAPE OF STACK : Round

MATERIAL OF STACK : PVDF- FRP

FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit#	Reference Method
1.	Dimensions of Stack	m	0.3	NA	-
2.	C/s area of Stack	m ²	0.071	NA	-
3.	Temperature	°C	37	NA	IS 11255 (Part 1)
4.	Velocity	m/s	4.35	NA	IS 11255 (Part 1)
5.	Flue Gas Discharge	Nm ³ /hr	1065.4	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm ³	15.1	150	IS 11255 (Part 1)

NA: Not Applicable. #: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by

Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY

[Signature]

Technical Manager
 Authorized Signatory

END OF REPORT

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TEST REPORT

NAME & ADDRESS OF CUSTOMER: M/s. VN Creative Chemicals Pvt. Ltd. C-104, MIDC Mahad, Behind MIDC Fire Station, Next to Lass Supergenies Ltd. Unit-1, Mahad, Maharashtra 402309		REPORT NO :SAL/FM/59/VCCPL/SSM(22-23-531C)
		REPORT DATE :07/04/2023
		CUSTOMER REF :4390000785
		REF DATE :08/04/2022
SAMPLE TYPE:		SCRUBBER STACK EMISSION MONITORING
SAMPLE REGISTRATION NO.	:SSM(22-23-531C)	LOCATION : Caustic Scrubber for HCL recovery C 501B
SAMPLING PLAN & METHOD NO.	: As per Reference Method	SAMPLE COLLECTED BY : SKYLAB
SAMPLING DATE	:30/03/2023	STACK HEIGHT FROM GL : 3Meters
SAMPLING TIME	:01:10PM	SHAPE OF STACK : Round
ANALYSIS START DATE	:01/04/2023	MATERIAL OF STACK : PVDF- FRP
ANALYSIS COMPLETE DATE	:07/04/2023	FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1.	Hydrogen Chloride (HCl)	ppm	7.1	35	EPA method 26a

*: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per MPCB Consent.

Verified by


 Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY


 Technical Manager
 Authorized Signatory

END OF REPORT

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ULR NO: TC515023000013206F

TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergenerles Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO : SAL/FM/61/ VCCPL/WW(22-23-2203F)

REPORT DATE : 08/04/2023

CUSTOMER REF :4390000785

REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : WW(22-23-2203F)

SAMPLING PLAN & METHOD NO.: IS 3025 Part 1:1987 RA 2019

SAMPLING DATE : 30/03/2023

SAMPLE RECEIPT DATE : 31/03/2023

ANALYSIS START DATE : 31/03/2023

ANALYSIS COMPLETE DATE : 08/04/2023

EFFLUENT WATER ANALYSIS

LOCATION : ETP Outlet

SAMPLE SPECIFICATION: Waste Water

SAMPLE COLLECTED BY: SKYLAB

SAMPLE QUANTITY : 2 Ltrs

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1	pH	-	6.33	5.5 - 9.0	IS 3025 (Part 11)
2	Total suspended solids	mg/L	8	100	IS 3025 (Part 17)
3	Total dissolved solids	mg/L	716	2100	IS 3025 (Part 16)
4	Chemical Oxygen Demand (COD)	mg/L	12	250	IS 3025 (Part 58)
5	Biochemical Oxygen Demand (BOD)	mg/L	<5	30	IS 3025 (Part 44)
6	Oil & Grease	mg/L	<5	10	IS 3025 (Part 39)
7	Sulphate, SO ₄	mg/L	<10	1000	IS 3025 (Part 24)
8	Chloride	mg/L	89	600	IS 3025 (Part 32)
9	Phosphate as PO ₄	mg/L	<0.1	5	IS 3025 (Part 31)
10	Zinc	mg/L	0.11	5	IS 3025 (Part 49)
11	Metal-Iron	mg/L	4.10	5	IS 3025 (Part 2)
12	Total Kjeldahal Nitrogen (TKN)	mg/L	1.68	50	IS 3025 (Part 34)
13	Total Ammonical Nitrogen	mg/L	0.56	50	IS 3025 (Part 34)

*: As per MPCB Consent & CPCB Guidelines.

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per specified standard.

Verified by



Sr. Analyst

For SKYLAB ANALYTICAL LABORATORY




Technical Manager
 Authorized Signatory

END OF REPORT

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TEST REPORT

NAME & ADDRESS OF CUSTOMER:

M/s. VN Creative Chemicals Pvt. Ltd.
 C-104, MIDC Mahad, Behind MIDC Fire Station, Next to
 Lass Supergeneries Ltd. Unit-1, Mahad,
 Maharashtra 402309

REPORT NO : SAL/FM/61/ VCCPL/WW(22-23-2203F)
 REPORT DATE : 08/04/2023
 CUSTOMER REF :4390000785
 REF DATE : 08/04/2022

SAMPLE TYPE:

SAMPLE REGISTRATION NO. : WW(22-23-2203F)
 SAMPLING PLAN& METHOD NO.:IS 3025 Part 1:1987 RA 2019
 SAMPLING DATE :30/03/2023
 SAMPLE RECEIPT DATE :31/03/2023
 ANALYSIS START DATE :31/03/2023
 ANALYSIS COMPLETE DATE :08/04/2023

EFFLUENT WATER ANALYSIS

LOCATION : ETP Outlet
 SAMPLE SPECIFICATION: Waste Water
 SAMPLE COLLECTED BY: SKYLAB
 SAMPLE QUANTITY :2 Ltrs

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1	Bioassay Test	%	92	90% survival of fish after 90 hours in 100% effluent	IS 6582 (Part 1)

*: As per MPCB Consent

Opinion/Observation: Analyzed parameters in above tested sample are within limit as per specified standard.

Verified by



Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY



Technical Manager
 Authorized Signatory

END OF REPORT

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Annexure - 15

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2022

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000044378

Submitted Date

27-08-2022

PART A

Company Information

Company Name

VN Creative Chemicals Private Limited

Application UAN number

0000032995

Address

Plot No.C -104, Mahad Industrial Area, Village
Khaire, Taluka Mahad, District Raigad

Plot no

C-104

Taluka

Mahad

Village

Khaire

Capital Investment (In lakhs)

1730

Scale

Large scale

City

Mahad

Pincode

402309

Person Name

Mr.S.S.Godse

Designation

Authorized Signatory

Telephone Number

09130484734

Fax Number

02221649766

Email

vncccpl.mahad@keva.co.in

Region

SRO-Mahad

Industry Category

Red

Industry Type

R22 Organic Chemicals manufacturing

Last Environmental statement submitted online

yes

Consent Number

Format 1.0/BO/AST/UAN
No.0000032995/ O-1810001495

Consent Issue Date

26/10/2018

Consent Valid Upto

30/06/2023

Establishment Year

1992

Date of last environment statement submitted

Sep 23 2021 12:00:00:000AM

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

Product Information

Product Name

Dried Aluminium Hydroxide Gel on 100% basis

Consent Quantity

600

Actual Quantity

159.3

UOM

MT/A

Aluminium Phosphate (IP/BP/USP)

36

4.23

MT/A

Magaldrate

480

260.7

MT/A

Methyl Nonyl Acetophenone / Tonalid

1440

731.33

MT/A

Propyl Acetophenone

01

7.59

MT/A

By-product Information

By Product Name

Consent Quantity

Actual Quantity

UOM

HCl -100% basis	480	0	MT/A
Intermediate Aluminium Chloride (PAC)	1668	1133	MT/A

Part-B (Water & Raw Material Consumption)

<u>1) Water Consumption in m3/day</u>			
Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day	
	200	174.80	
Cooling	18	15.20	
Domestic	10	9.00	
All others	10	2.00	
Total	238	201.00	

<u>2) Effluent Generation in CMD / MLD</u>			
Particulars	Consent Quantity	Actual Quantity	UOM
FROM PROCESS	205	85.00	CMD

<u>2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)</u>			
Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Aroma & Ant-acid chemicals	58.580	63.10	Ton/Ton

<u>3) Raw Material Consumption (Consumption of raw material per unit of product)</u>			
Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Aluminium Chloride Solution	0.55	3.09	Ton/Ton
Aluminium Tri Hydroxide	0.095	0.27	Ton/Ton
Caustic Soda Lye	0.25	0.43	Ton/Ton
Magnesium Sulphate Solution	0.270	0.89	Ton/Ton
Phosphoric Acid	0.45	0.93	Ton/Ton
Soda Ash Light	0.100	0.94	Ton/Ton
Sodium Aluminate	0.45	1.18	Ton/Ton
Magnesium Chloride Crystals	0.275	0.19	Ton/Ton
2,3 DMB-1	0.87	0.87	Ton/Ton
Para cymene	0.74	0.72	Ton/Ton
TBC	0.01	0.01	Ton/Ton
AlCl3 Powder	0.761	0.76	Ton/Ton
EDC	0.083	0.08	Ton/Ton
Acetyl chloride	0.475	0.46	Ton/Ton
Cumene	0	1.51	Ton/Ton

<u>4) Fuel Consumption</u>			
Fuel Name	Consent quantity	Actual Quantity	UOM
Furnace Oil	2251.96	1803.82	MT/A
Diesel	1609.03	20.94	MT/A

Part-C

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

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
pH	0	6.7	0	6 to 9	NA
TDS	80.96	784	0	2100	NA
SS	3.10	30	0	100	NA
BOD	2.09	20	0	30	NA
COD	10.35	100	0	250	NA
Chloride	17.53	170	0	600	NA
Sulphate	10.33	100	0	1000	NA
Oil and Grease	0	0	0	10	NA
Iron	0	0	0	5	NA
Zinc	0	0	0	5	NA
Phosphates as P	0.03	0.27	0	5	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
	Quantity	Concentration	%variation		
Particulate Matter	44.52	74.527	0	150	NA
Sulphur Di Oxide- SO2	50.05	83.775	0	153	NA
Nitrogen Oxides- NOx	39.92	66.825	0	50	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
28.1 Process Residue and wastes	0	0	MT/A
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	446	1003	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	10.590	9.0	MT/A
37.3 Concentration or evaporation residues	57.200	119.237	MT/A

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
--------------------------	--------------------------------------	-------------------------------------	-----

Steel Scrap	11.629	8.280	MT/A
Wood Scrap	1.250	0.0	MT/A
Plastic Scrap	0.700	3.3	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
No	0	0	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

Part-F

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

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
35.3 Chemical sludge from waste water treatment	9.0	MT/A	NA
37.3 Concentration or evaporation residues	119.237	MT/A	NA

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Steep Scrap	8.280	MT/A	0
Wood Scrap	0.0	MT/A	0
Plastic Scrap	3.3	MT/A	0

Part-G

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

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
RO membrane	1182	0	0	0	13.8	0

Part-H

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Use of Express Feeder	Reduction in air emissions	150

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Installation of Polishing RO for recycle and reuse of water	Recycle and reuse of water	60

Enhancement in Scrubber System	Scrubber System	06
Replacement of RO Membrane	Recycle and reuse of water	13.8

Part-I

Any other particulars for improving the quality of the environment.

Particulars

No

Name & Designation

Mr.S.S.Godse, Authorized Signatory

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000044378

Submitted On:

27-08-2022