

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**



## **CONTENTS**

- |                       |   |
|-----------------------|---|
| 1. Project Background | 3 |
| 2. Information sheet  | 4 |

### **ANNEXURES:**

- Annexure 1** : Copy of EC letter
- Annexure 2** : Copy of Change in Name letter
- Annexure 3** : 1st CTE copy of organic product
- Annexure 4** : 1st CTO copy as per EC
- Annexure 5** : CTO copy under product mix
- Annexure 6** : Valid CTO for existing unit
- Annexure 7** : MAHAD CETP Membership
- Annexure 8** : Air quality monitoring reports
- Annexure 9** : HIRA is designed and place as per SOP's
- Annexure 10** : Solvent Recovery Details
- Annexure 11** : EHS Cell
- Annexure 12** : Year-wise EMP Budget
- Annexure 13** : Stack Monitoring Reports
- Annexure 14** : ETP Treated Water Analysis Reports
- Annexure 15** : FORM-V for FY 2021-22



## 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 14<sup>th</sup> 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 30<sup>th</sup> 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:3-1<sup>st</sup> 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:4-1<sup>st</sup> 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. formate 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 m<sup>2</sup> 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

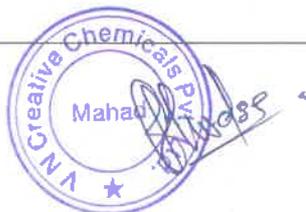
Western Region, Regional Office, Nagpur

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 <sup>th</sup> June,2012.																
4.	Location	Raigad.																
	a) District (s)	:																
	b) State (s)	: Maharashtra																
	c) Location latitude / longitude		<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>18<sup>o</sup>6'26.53"N</td> <td>73<sup>o</sup>28'59.99"E</td> </tr> <tr> <td>B</td> <td>18<sup>o</sup>6'26.61"N</td> <td>73<sup>o</sup>29'5.09"E</td> </tr> <tr> <td>C</td> <td>18<sup>o</sup>6'26.42"N</td> <td>73<sup>o</sup>29'0.32"E</td> </tr> <tr> <td>D</td> <td>18<sup>o</sup>6'26.60"N</td> <td>73<sup>o</sup>29'5.09"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	18 <sup>o</sup> 6'26.53"N	73 <sup>o</sup> 28'59.99"E	B	18 <sup>o</sup> 6'26.61"N	73 <sup>o</sup> 29'5.09"E	C	18 <sup>o</sup> 6'26.42"N	73 <sup>o</sup> 29'0.32"E	D	18 <sup>o</sup> 6'26.60"N	73 <sup>o</sup> 29'5.09"E
		Point	Latitude	Longitude														
A		18 <sup>o</sup> 6'26.53"N	73 <sup>o</sup> 28'59.99"E															
B		18 <sup>o</sup> 6'26.61"N	73 <sup>o</sup> 29'5.09"E															
C	18 <sup>o</sup> 6'26.42"N	73 <sup>o</sup> 29'0.32"E																
D	18 <sup>o</sup> 6'26.60"N	73 <sup>o</sup> 29'5.09"E																
5.	<b>Address for Correspondence</b> a) Address of the Concerned Project Chief Engineer (with Pin code & Telephone / Telex / Fax Numbers) 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-9604699906. Fax-022-21649766.  Sanjeev Godse, Authorized Signatory, C/o S H Kelkar & Company Limited, LBS Marg, Mulund-West. Mumbai-400080. Tel-9168448726 Fax-022-21649766. e-mail: <a href="mailto:vncccpl.mahad@keva.co.in">vncccpl.mahad@keva.co.in</a> .																
6.	Salient features a) of the Project	Project Spectrum	Synthetic organic chemicals industry.															
		Total Plot Area	14,000.00 sq. m.															



		<b>Project Resident Population size</b>	Floating population of individual tenant approx.	
			As per EC/CTO	Present Scenario
		<b>Direct Employment</b>	80	80
		<b>Water Demand</b>	30 CMD Organic Unit Total Water-238 CMD.	30 CMD-Organic Unit Total Water-238 CMD.
		<b>Source of Water</b>	MIDC	MIDC
		<b>Waste Water Generation</b>	205 CMD	205 CMD
		<b>Sewage Treatment Plant (STP)</b>	Treated in septic tank followed by soak pit.	Treated in septic tank followed by soak pit.
		<b>Effluent Treatment Plant (ETP)</b>	225 CMD	225 CMD
		<b>Common Effluent Treatment Plant (CETP)</b>	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.	
		<b>Non-Hazardous Solid Waste generation</b>	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
		<b>Industrial Solid Waste generated</b>		
		<b>Waste</b>	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
<b>Power requirement</b>	350 KVA			
<b>Cost of the Project</b>	As per EC	Present Scenario		
	Rs 11.42 Cr	Rs 17.30 Cr		
<b>b) of the Environmental Management Plans</b>				



## 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.	<b>Breakup of the Project Area</b> 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.	<b>Breakup of the project affected population with the enumeration of those losing Houses / Dwelling units only, Agricultural Land &amp; Landless Laborers / Artisans:</b> 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)	<b>Financial Details:</b> 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
<b>10</b>	<b>Forest Land Requirement</b>		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
<b>11</b>	<b>The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads.), if any with quantitative information required.</b>	:	NA
<b>12</b>	<b>Status of construction (Actual &amp; /or planned)</b>	:	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
<b>13</b>	Reasons for the delay if the project is yet to start	:	NA
<b>14</b>	<b>Dates of Site Visits</b>		
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**

*[Handwritten Signature]*

**AUTHORIZED SIGNATORY**



## CONDITION -WISE COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE

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

Sr.No.	Conditions	Status of Compliance along with details
<b><u>General Conditions.</u></b>		
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. <b>Annexure 7- MAHAD CETP Membership</b>
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 SO2 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 <b>Annexure-8</b>
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 spersion 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. <b>Annexure-9: HIRA of the operation process.</b>
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 <b>Annexure 10- Solvent Recovery Details</b>	
	➤ 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. <b>Annexure 11- EHS Cell.</b>	
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.		<b>Annexure 12- Year wise EMP Budget</b>	



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 oh 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 <a href="http://ec.maharashtra.gov">http://ec.maharashtra.gov</a>	
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, 502, NOx (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 <b>Annexure 8- Ambient Air Quality Reports</b> <b>Annexure 13-Stack Monitoring Reports</b> <b>Annexure 14- ETP Treated Water Analysis Reports</b>
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	<b>Validity of Environmental Clearance:</b> 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 Supergeneries 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 <sup>#</sup>	Reference Method
1.	Particulate Matter as PM10	µg/m <sup>3</sup>	82.1	100	IS:5182, (Part - 23)
2.	Particulate Matter as PM2.5	µg/m <sup>3</sup>	44.1	60	IS:5182, (Part 24)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	22.4	80	IS:5182, (Part - 2)
4.	Nitrogen Oxide (NO <sub>x</sub> )	µg/m <sup>3</sup>	39.7	80	IS: 5182, (Part - 6)
5.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<20	180	Method 411, Methods of Air Sampling and Analysis, 3rd Edition
6.	Carbon Monoxide (CO) Duration of Sampling 8 hr	mg/m <sup>3</sup>	0.48	2 for 8 hrs	IS 5182 (Part 10)
7.	Carbon Monoxide (CO)	ppm	0.38	NS	IS 5182 (Part 10)
8.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	26.6	400	Method 401, Methods of Air Sampling and Analysis, 3rd Edition
9.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	<0.1	5	IS 5182 (Part 11)
10.	Benzo(a)pyrene	ng /m <sup>3</sup>	<1	1	IS 5182 (Part 12)
11.	Metal-Lead	µg/m <sup>3</sup>	<0.1	1	Method 822, Methods of Air Sampling and Analysis, 3rd Edition
12.	Metal-Arsenic	ng /m <sup>3</sup>	<1	6	Method 302, Methods of Air Sampling and Analysis, 3rd Edition
13.	Metal-Nickel	ng /m <sup>3</sup>	<0.5	20	Method 822, Methods of Air Sampling and Analysis, 3rd Edition

<sup>#</sup>: 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.

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: AMBIENT AIR QUALITY MONITORING**

**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

**LOCATION :** Near Pump House  
**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/m <sup>3</sup>	68.5	100	IS:5182, (Part – 23)
2.	Particulate Matter as PM2. 5	µg/m <sup>3</sup>	35.9	60	IS:5182, (Part 24)
3.	Sulphur Dioxide (SO2)	µg/m <sup>3</sup>	16.4	80	IS:5182, (Part – 2)
4.	Nitrogen Oxide (NOx)	µg/m <sup>3</sup>	31.8	80	IS: 5182, (Part – 6)
5.	Ozone (O3)	µg/m <sup>3</sup>	<20	180	Method 411, Methods of Air Sampling and Analysis, 3rd Edition
6.	Carbon Monoxide (CO) Duration of Sampling 8 hr	mg/m <sup>3</sup>	0.39	2 for 8 hrs	IS 5182 (Part 10)
7.	Carbon Monoxide (CO)	ppm	0.31	NS	IS 5182 (Part 10)
8.	Ammonia (NH3)	µg/m <sup>3</sup>	25.2	400	Method 401, Methods of Air Sampling and Analysis, 3rd Edition
9.	Benzene (C6H6)	µg/m <sup>3</sup>	<0.1	5	IS 5182 (Part 11)
10.	Benzo(a)pyrene	ng /m <sup>3</sup>	<1	1	IS 5182 (Part 12)
11.	Metal-Lead	µg/m <sup>3</sup>	<0.1	1	Method 822, Methods of Air Sampling and Analysis, 3rd Edition
12.	Metal-Arsenic	ng /m <sup>3</sup>	<1	6	Method 302, Methods of Air Sampling and Analysis, 3rd Edition
13.	Metal-Nickel	ng /m <sup>3</sup>	<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.

# HAZOP STUDY REPORT

OF

**MUSK PROJECT ,  
MAHAD, MAHARASHTRA**

**FOR**

PREPARED BY

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

[www.aprms.com](http://www.aprms.com)

0	25 JULY 2017	BV	KNS		FOR REVIEW / COMMENT
<b>REV.</b>	<b>DATE</b>	<b>ORIGINATOR</b>	<b>REVIEWED</b>	<b>APPROVED</b>	<b>DESCRIPTION</b>

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

Page 2 of 253

**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.

## TABLE OF CONTENTS

<b>LIST OF ABBREVIATION .....</b>	<b>5</b>
<b>LIST OF GLOSSARY OF TERMS .....</b>	<b>6</b>
<b>1. INTRODUCTION.....</b>	<b>9</b>
<b>1.1. PROJECT BACKGROUND.....</b>	<b>9</b>
<b>1.2. ABOUT CONSULTANT .....</b>	<b>9</b>
<b>2. SCOPE.....</b>	<b>9</b>
<b>3. TEAM COMPOSITION.....</b>	<b>10</b>
<b>4. PROCESS DESCRIPTION .....</b>	<b>11</b>
<b>5. DOCUMENT REFERENCES.....</b>	<b>12</b>
<b>6. LIST OF NODES .....</b>	<b>14</b>
<b>7. HAZOP METHODOLOGY .....</b>	<b>17</b>
<b>7.1. HAZOP PROCEDURE.....</b>	<b>17</b>
<b>7.2. HAZOP GUIDEWARDS AND PARAMETERS.....</b>	<b>19</b>
<b>7.3. NODE.....</b>	<b>20</b>
<b>7.4. CAUSES.....</b>	<b>20</b>
<b>7.5. CONSEQUENCES.....</b>	<b>20</b>
<b>7.6. SAFEGUARDS.....</b>	<b>21</b>



**HAZOP STUDY  
FOR  
MUSK PROJECT**



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

25 JULY 2017

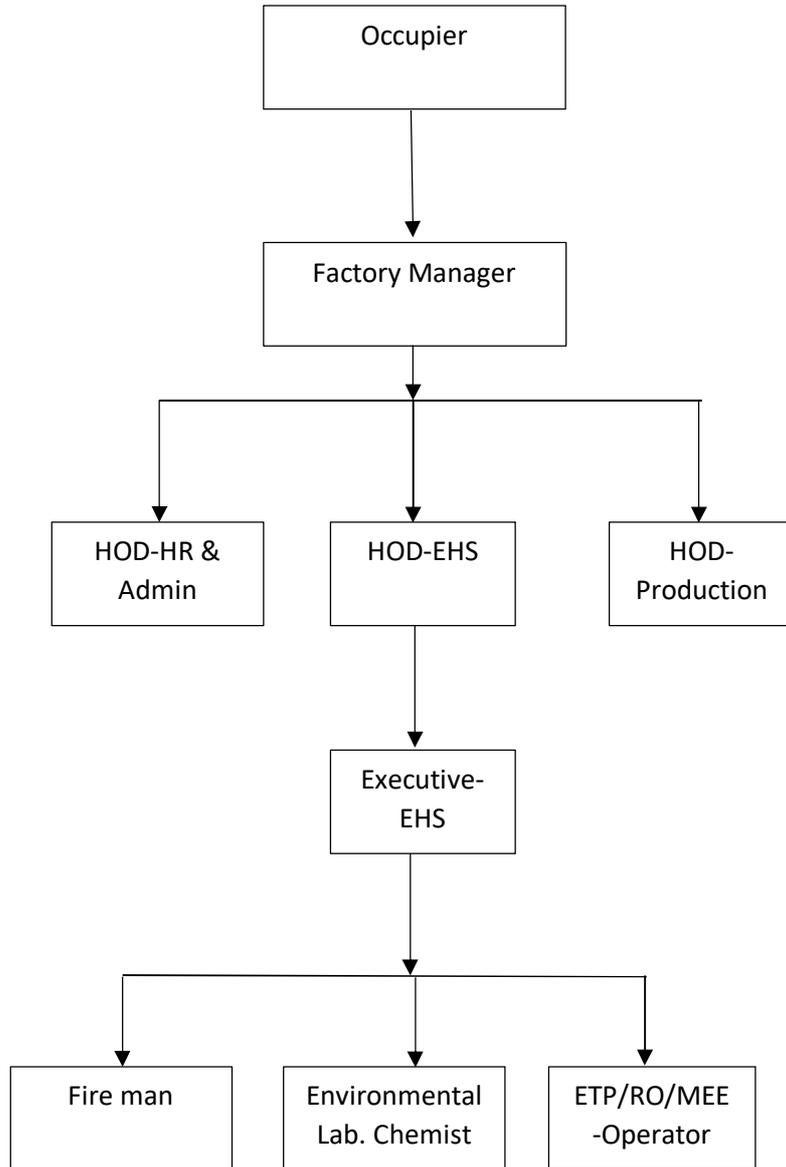
Page 4 of 253

<b>7.7. RECOMMENDATION-ACTIONS.....</b>	<b>21</b>
<b>7.8. HAZOP ASSUMPTION.....</b>	<b>21</b>
<b>7.9. HAZOP LIMITATION.....</b>	<b>22</b>
<b>8. FINDINGS OF THE REVIEW.....</b>	<b>22</b>
<b>APPENDIX – 1 –ATTENDEES LIST.....</b>	<b>1</b>
<b>APPENDIX – 2 –HAZOP WORKSHEETS.....</b>	<b>1</b>
<b>APPENDIX – 3 –HAZOP ACTION/RECOMMENDATION LIST .....</b>	<b>1</b>
<b>APPENDIX – 4 –NODE MARKED PIDS .....</b>	<b>1</b>

ANNEXURE-11

VN CREATIVE CHEMICALS PRIVATE LIMITED, MAHAD

EHS CELL



## Annexure - 12

### VN CREATIVE CHEMICALS PRIVATE LIMITED, MAHAD

#### Details of Expenses for Environment Protection

<b>Sr. No.</b>	<b>Description</b>	<b>Yr-2018-2019</b>	<b>Yr-2019-2020</b>	<b>Yr-2020-2021</b>	<b>Yr-2021-2022</b>	<b>Yr-2022-2023</b>
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
<b>Total Expenses in Lakh</b>		<b>200.00</b>	<b>201.95</b>	<b>250.28</b>	<b>417.29</b>	<b>335.57</b>

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 <sup>#</sup>	Reference Method
1.	Dimensions of Stack	m	1.2	NA	-
2.	Cross section area of Stack	m <sup>2</sup>	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 <sup>3</sup> /hr	24399.1	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	53.1	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	24.6	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO <sub>2</sub> )	Kg/Day	14.41	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	45.1	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO <sub>x</sub> )	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**

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.

ULR NO: TC515023000013197F

**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(22-23-890A)  
**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 <sup>2</sup>	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 <sup>3</sup> /hr	2808.6	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	57.5	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	65.6	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO <sub>2</sub> )	Kg/Day	4.43	53.76	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	74	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO <sub>x</sub> )	ppm	36.0	50	IS 11255 (Part 7)
11.	Carbon Monoxide (CO)	mg/Nm <sup>3</sup>	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.

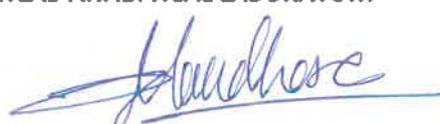
Verified by



Sr. Analyst



For SKYLAB ANALYTICAL LABORATORY



Technical Manager  
 Authorized Signatory

**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.

**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(22-23-890A)  
 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.	Hydrocarbon (HC)	mg/Nm <sup>3</sup>	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

**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.

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 <sup>#</sup>	Reference Method
1.	Dimensions of Stack	m	0.4	NA	-
2.	Cross section area of Stack	m <sup>2</sup>	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 <sup>3</sup> /hr	2711.0	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	54.4	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	61.5	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO <sub>2</sub> )	Kg/Day	4.0	53.76	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	78.1	NS	IS 11255 (Part 7)
10.	Nitrogen Oxide (NO <sub>x</sub> )	ppm	38	50	IS 11255 (Part 7)
11.	Carbon Monoxide (CO)	mg/Nm <sup>3</sup>	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



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.

**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.	Hydrocarbon (HC)	mg/Nm <sup>3</sup>	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



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.

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

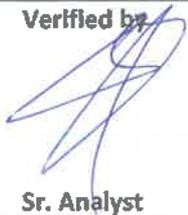
**STACK EMISSION MONITORING**  
**LOCATION** :TFH Heater (10 Lac kcal/hr)  
**SAMPLE COLLECTED BY** : SKYLAB  
**STACK HEIGHT FROM GL** :35Meters  
**SHAPE OF STACK & STACK TOP** : Round  
**MATERIAL OF STACK** :MS  
**FUEL USED (CONSUMPTION)** :LSHS (119 Kg/Hr.)

Sr. No.	Test Parameter	Unit	Result	Limit <sup>a</sup>	Reference Method
1.	Diameter of Stack	m	1.5	NA	-
2.	Cross section area of Stack	m <sup>2</sup>	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 <sup>3</sup> /hr	29095.3	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	51.8	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	28.7	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO <sub>2</sub> )	Kg/Day	20.05	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO <sub>x</sub> ) -	mg/Nm <sup>3</sup>	41	NS	IS 11255, (Part 7)
10.	Nitrogen Oxide (NO <sub>x</sub> )	ppm	19.96	NS	IS 11255, (Part 7)

NA: Not Applicable. NS: Not Specified. <sup>a</sup>: 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**

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.

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 <sup>2</sup>	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 <sup>3</sup> /hr	3043.8	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	52.0	150	IS 11255 (Part 1)
7.	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	45.1	NS	IS 11255 (Part 2)
8.	Sulphur Dioxide (SO <sub>2</sub> )	Kg/Day	3.30	NS	IS 11255 (Part 2)
9.	Nitrogen Oxide (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	36	NS	IS 11255, (Part 7)
10.	Nitrogen Oxide (NO <sub>x</sub> )	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

**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.

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 <sup>2</sup>	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 <sup>3</sup> /hr	1157.3	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	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  
 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.

**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.	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




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.

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 <sup>#</sup>	Reference Method
1.	Dimensions of Stack	m	0.4	NA	-
2.	C/s area of Stack	m <sup>2</sup>	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 <sup>3</sup> /hr	881.9	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	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**

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.

**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**

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.

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 <sup>2</sup>	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 <sup>3</sup> /hr	1065.4	NA	IS 11255 (Part 1)
6.	Total Particulate Matter (TPM)	mg/Nm <sup>3</sup>	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



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.

## 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

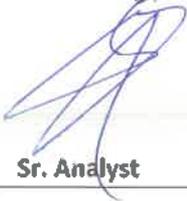
FUEL USED (CONSUMPTION) : NA

Sr. No.	Test Parameter	Unit	Result	Limit*	Reference Method
1.	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

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.

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 <sup>#</sup>	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 <sub>4</sub>	mg/L	<10	1000	IS 3025 (Part 24)
8	Chloride	mg/L	89	600	IS 3025 (Part 32)
9	Phosphate as PO <sub>4</sub>	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**

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.

**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**

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.



# 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)

### 1) Water Consumption in m3/day

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

### 2) Effluent Generation in CMD / MLD

<b>Particulars</b>	<b>Consent Quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
FROM PROCESS	205	85.00	CMD

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

<b>Name of Products (Production)</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
Aroma & Ant-acid chemicals	58.580	63.10	Ton/Ton

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

<b>Name of Raw Materials</b>	<b>During the Previous financial Year</b>	<b>During the current Financial year</b>	<b>UOM</b>
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

### 4) Fuel Consumption

<b>Fuel Name</b>	<b>Consent quantity</b>	<b>Actual Quantity</b>	<b>UOM</b>
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

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

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

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

#### 2) From Pollution Control Facilities

<b>Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
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

<b>Non Hazardous Waste Type</b>	<b>Total During Previous Financial year</b>	<b>Total During Current Financial year</b>	<b>UOM</b>
---------------------------------	---	--	------------

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