SANMAR

Chemplast Sanmar Limited

Karaikal Plant:
Melavanjore Village T R Pattinam Panchayat
Nagore 611 002 India
Tel + 91 4365 256 475/ 476
E-mail: csl@sanmargroup.com
www.chemplastsanmar.com
CIN L24230TN1985PLC011637

CSL/KKL/EN/MOEF&CC/2024/NOV/400
11 NOV 2024
PVC Division

Deputy Director General of Forests
Ministry of Environment, Forest and Climate Change (MoEF&CC)
Integrated Regional Office, 1st Floor, Additional Office Block for GPOA
Shastri Bhawan, Haddows Road, Nungambakkam, Chennai - 600006, Tamilnadu

Respected Sir/Madam,

Subject: Submission of Half-Yearly Compliance Status Report of the Environmental Clearance (EC) given by Ministry of Environment, Forest and Climate Change (MoEF&CC) -reg.
Reference: MoEF&CC EC/File No.: J-11011/24/96-IA.II (I) dated 03 JUL 1996 & Transfer of EC dated 26 DEC 2022

With references to the above mentioned subject, please find the enclosed compliance status report to the conditions contained in the MoEF&CC's EC "60 TPD Chlor-Alkali Plant at Melavanjore - Karaikal, Puducherry" for the period from APRIL 2024 to SEPTEMBER 2024.

Thanking you and assuring our best cooperation always,

Yours faithfully,
For Chemplast Sanmar Limited,

S.Mathivanan
Senior Vice President – Operations

Enclosures: As mentioned above

Copy to:
The Member Secretary
Puducherry Pollution Control Committee
3rd Floor, PHB Building, Anna Nagar
Puducherry - 605005

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Responsible Care®

COMPLIANCE STATUS

Subject/Proposal name:
60 TPD Chlor-Alkali Plant at Melavanjore - Karaikal, Puducherry
Reference:
Environmental Clearance/File No.: J-11011/24/96-IA.II(I) dated 03 JUL 1996 & Transfer of EC dated 26 DEC 2022

PRESENT STATUS OF THE PROJECT

The said project namely "60 TPD Chlor-Alkali Plant at Melavanjore - Karaikal, Puducherry" is completed and in operation

Conditions and Environmental Safeguards:

#	Conditions description	Compliance status
2 i	The project authorities must strictly adhere to stipulations made by the State Pollution Control Board and the State Government	Complying fully to all the conditions stipulated in Air & Water Consent Orders issued by Puducherry Pollution Control Committee (PPCC). *-The latest Consent conditions (CTO) relevant to Air & Water Act is detailed under Annexure 1*
ii	No further expansion or modification in the plant should be carried out without prior approval of this Ministry	Being complied. Expansion or Modification in the plant will be carried out with prior approval from MoEF & CC as per the requirements of EIA Notification, 2006
iii	Gaseous (Cl2,SO2,Nox and HC)and particulate emissions from the various process vents and storage tanks should conform to the standards prescribed by the competent authorities, from time to time. At no time, the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the pollution control measures are rectified to achieve the desired efficiency	Complied. *-Gaseous emissions namely Cl2, SO2 , Nox etc. and particulate emission data during the compliance period (APR 24 to SEP 24) is attached as Annexure 2*
iv	At least three ambient air quality monitoring stations should be established in the down wind direction as well as where maximum ground level concentration of SPM, SO2, Nox and Cl2 are anticipated. The selection of the AAQ monitoring stations should be based on modeling exercise to represent short term ground level concentrations, sensitive targets etc. in consultation with State Pollution Control Board Stack emissions should also be regularly monitored by installing stack monitoring devices in consultation with the State Pollution Control Board	Complied. At least three AAQ monitoring is done in regular intervals by NABL/MoEF&CC approved third party laboratory. Selection of locations are based upon the recommendations made by the Puducherry Pollution Control Committee (PPCC). These reports are being submitted to PPCC on regular basis. Stack monitoring devices are fixed in our Boiler & Process stack and is connected to PPCC/CPCB servers via CARE Air Center. Regular monitoring is also done through

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		approved third party laboratory and the reports are submitted to PPCC as well.
	Data on AAQ and stack emissions should be submitted regularly to this ministry once in six months and the State Pollution Control Board once in three months along with the statistical analysis and interpretation	Ambient Chlorine Monitoring & Stack emissions sensors are connected to the PPCC/CPCB servers via CARE Air Center and data are transmitted regularly. PPCC also carrying out the monitoring regularly. *-Environment monitoring data during the compliance period (APR 24 to SEP 24) is attached as Annexure 3*
v	Fugitive emissions should be controlled, regularly monitored and data recorded	Complied. Fugitive emission of Chlorine is monitored through online sensors and data are recorded.
	Chlorine sensors should be installed in the chlorine storage area at lower level between the tanks	Chlorine sensors are installed at strategic locations in the storage/handling areas and the real-time data are being transmitted to PPCC. *-Online monitoring data (Chlorine sensors) during the compliance period (APR 24 to SEP 24) is attached as Annexure 4*
vi	Liquid effluent coming out of the plant should conform to the standard as prescribed by the State Pollution Control Board/the Ministry of Environment and Forests under Environment (Protection) Act, 1986	Complied. Raw effluent is getting collected at ETP and treated.
	Recycling and reuse of the treated waste water should be maximized to the extent possible	The treated trade effluent is fully recycled and reused in our Chlor-Alkali process itself. Company has achieved Zero Liquid Discharge status. *-Analysis report of reject water during the compliance period (APR 24 to SEP 24) is attached as Annexure 5*
vii	Adequate measures for control of noise should be taken so as to keep noise levels below 85 dB in the work environment	Complied. Adequate measures (Acoustic control) are taken to control the noise and the levels are within the prescribed standards stipulated by the Boards from time to time. Regular monitoring of noise is been done and reported to PPCC.
	Persons working near the noisy machines like blowers, compressors etc. should be provided with well designed ear muffs/plugs. Besides, measures should be taken to reduce the noise by engineering methods	Based upon the noise monitoring survey, well designed ear muffs/plugs are given to persons working near the noisy areas. Required engineering control is adopted for all our machines to reduce noise in the

		design phase itself. *-Noise survey report during the compliance period (APR 24 to SEP 24) is attached as Annexure 6*
viii	Occupational health surveillance programme should be undertaken as a regular exercise especially with respect to exposure to chlorine, thermal stresses and noise pollution	Complied. Occupational health surveillance is being done on periodic basis to all our employees/contractors working in the hazardous area. The reports are available in our Occupational Health Centre managed by a Doctor supported by nurse. *-Sample reports on the heath surveillance is attached as Annexure 7*
ix	A green belt of adequate width and density (2000-2500 trees/ha) should be developed covering 12 acres of land using native plant species suitable for saline soil in consultation with local Agriculture Department. Final treated liquid effluent should be used for developing the greenery	Adequate green belt is maintained using native trees. We have around 11,300 numbers of trees in the area covering 12.5 Acres. Final treated sewage water is used for developing the green belt. *-Photographs of green belt is attached as Annexure 8*
x	Suitable alarm system and standard procedure for transmitting the information on accidental release of chlorine to nearby areas and common focal point should be established. Steps should also be taken to ensure access to information on weather conditions prevailing at that time and weather forecast. Wind socks at appropriate locations should be provided Necessary approval may be taken from the Explosives Department/Chief Inspector of Factories regarding the safety of the pressure vessels, storage tanks etc.	Complied. Accidental release of Chlorine to nearby areas are being monitored by the online sensors which are connected to the PPCC/CPCB servers via our CARE AIR Center. Internet facility made available to access the information on weather conditions prevailing at that time and weather forecast. Wind socks are provided in the appropriate locations to identify the direction during emergency. On-site & Off site mock drills are being carried out periodically. Required approvals are taken from Petroleum & Explosives Safety Organisation (PESO) and Inspector of Factories (IF) and renewed from time to time for pressure vessels and storage tanks. *-Latest PESO approvals for storage tanks are attached as Annexure 9*
xi	Efforts should be made involving other industries operating in the area for development of facilities to combat emergency situation that may arise in case of an accident	MOU available with nearby industries to combat emergency situation that may arise in case of an accident. Regular off-site mock drills also conducted in co-ordination with Government officials including the District Administration. *-Sample mock drill report is attached as Annexure 10*

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xii	Hazardous wastes should be handled as per the Hazardous Waste (Management and Handling) Rules, 1989 of the EPA, 1986 and necessary approval of State Pollution Control Board for safe collection, treatment, storing and disposal of hazardous waste should be obtained	Complied. Hazardous Waste handling, collection, treatment, storing and disposal is been done as per the Authorization issued by PPCC (by the requirements of Hazardous Waste [Management and Transboundary Movement] Rules, 2016. *-Valid Hazardous Waste Authorization is attached as Annexure 11*
xiii	Handling, manufacture, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacturer, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994	Complied. Handling, manufacture, storage and transportation of hazardous chemicals are carried out in accordance with 'The Manufacturer, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994'. Point wise compliance status and action taken report submitted to PPCC regularly. *-Copy of compliance report is attached as Annexure 12*
xiv	Th project authorities must set up laboratory facilities for collection and analysis of samples under supervision of competent technical personnel, who will directly report to the Chief Executive	Complied. Laboratory facility available for collection/analysis of water samples. It is supervised by a qualified/experienced persons (9 members team) reporting to the Plant Head. Our Laboratory is having the facilities towards the environmental samples analysis like pH Meter, Conductivity Meter, Spectrophotometer, Gas Chromatograph (organic analysis), Nephelometric/Turbidimetric Analyser along with all facilities related to classical analysis
xv	A separate Environment Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive, who will report directly to the Head of the organisation	Complied. A separate Environment Department with a qualified/experienced person is available, reporting directly to the Plant Head & Corporate Environment Team
xvi	The funds earmarked for the environmental protection measures should not be diverted for any other purposes and year-wise expenditure should be reported to this ministry	Complied. Separate budget for the environmental protection measures is earmarked every year. All the expenses are recorded in advanced accounting system (SAP) of the company. Total environmental protection expenditures and investments FY 2023-24 was around Rs. 3.62 Crores which includes O&M contract, Green belt development, Environment monitoring, Waste management & disposal etc.
xvii	Six monthly reports on the compliance status of the project implementation vis-a-vis above environmental measures should be submitted to	Complied. Six monthly compliance report is regularly submitted to the Integrated Regional

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	Regional Office of the Ministry at Bangalore	Office of MoEF&CC, Chennai and PPCC. Latest Half Yearly Compliance Report for the period October 2023 to March 2024 was submitted to the authorities vide Letter No.: CSL/KKL/EN/ MOEF&CC/2024/ MAY/339 dated 27 MAY 2024
3	This Ministry or any competent authority may stipulate any further conditions (s) on receiving reports from the project authorities. The above conditions will be monitored by the Regional Office of this Ministry located in Karnataka (Bangalore)	Noted
4	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Noted
5	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974; and Air (Prevention and Control of Pollution) Act, 1981; The Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 with their amendments and rules	Agree to comply

Site visits of Ministerial staff

The following table shows the details of site inspection of ministerial representatives so far:

#	Name of Ministerial staff	Date of site inspection
1	Dr. Suresh, Regional Director & Ms. Anjana Kumari, Scientist -D Central Pollution Control Board (CPCB), Bangalore	07 NOV 2019
2	Dr.C.Palpandi, Scientist 'D' Ministry of Environment, Forest and Climate Change (MoEF&CC), Chennai	03 OCT 2024

Thanking you,

Yours faithfully,
For Chemplast Sanmar Limited,

S.Mathivanan,
Senior Vice President – Operations

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A1

COMPLIANCE REPORT TO THE CONDITIONS SPECIFIED IN PPCC -CONSENT ORDER (TO OPERATE & RENEWAL)

I. Notwithstanding anything contained in any other Laws, Rules and Notifications, this Consent (To Operate & Renewal) Order is purely given from the pollution angle

II. Consent is valid upto: 31-03-2024

III. Products permitted and their Production Capacities:

S. No.	Product permitted to be manufactured	Production Capacity permitted	Unit
(1)	Caustic Soda (Including Caustic Soda Flakes - 19162.5 TPA)	54750.0	TPA
(2)	Chlorine Gas	48181.0	TPA
(3)	Hydrogen Gas	1387.0	TPA
(4)	Hydrochloric Acid	16425.0	TPA
(5)	Sodium Hypo Chlorite	10950.0	TPA
(6)	Ethylene di chloride	84000.0	TPA
(7)	Natural Gas Based Power Generation (with standby engine)	8.5	MW

IV. **(i) Size:** Large **(ii) Category:** Red **(iii) Location:** Industrial **(iv) Area:** 76 Acres

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Air Consent Order (To Operate & Renewal)

No. PPCC/CTOR/AIR/TRP/KKL/JE/2019/851 dated 20 NOV 2019

#	Conditions specified in Consent Order	Compliance status
V	**Specific Conditions**	
1	No other products other than specified above, along with the respective permitted production capacities, vide Section III of this Consent Order, shall be manufactured, without prior consent of this Committee	Complied, products which are specified above are only manufactured within the permitted production capacities
2	**For Brine Purification Process:** Sludge from the Brine Purification Process, viz., primary purification and secondary purification, shall be disposed, in Secured Land Fills *(SLF's)*, provided with proper inner HDPE liners, as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019, as applicable	Complied, sludge from the Brine Purification Process is disposed to a Common Treatment, Storage & Disposal Facility (TSDF)
3	**For Caustic Soda Lye Manufacturing:** (a) The loading and transportation of the Caustic Soda Lye, to and through the tankers shall be done without any spillage in and around the premises of the unit. Spillages, if any, shall be cleaned appropriately, and the same shall be reused into the process, as applicable	(a) Caustic Soda lye loading is done through auto loading system with interlocking arrangements and the chance of spillages are very minimal

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	(b) Ambient Air Quality Monitoring and Stack Monitoring shall be conducted to detect ambient and stack emission status periodically. The analysis report shall be entered in a Register and copy of the Register shall be submitted to the Committee during renewal of Consent Order	(b) Monthly environmental monitoring is been done through NABL/MoEF&CC approved laboratory and reports are submitted to your good office regularly
4	**For Caustic Soda Flakes Manufacturing:** (a) The fuel used for Caustic Soda Flakes production in the Fusion Furnace shall be Hydrogen Gas only, for heating of the Molten Salt and the quantity of Hydrogen Gas used shall not exceed 1100 Nm^3/Hr., at any point of time (b) The emission arising from the above combustion of Hydrogen Gas shall be disposed off through a Stack (No. 1) of height, at least 46.0 meters from the ground level	(a) Complied, fuel used for Caustic Soda Flakes production is Hydrogen Gas only and its consumption is within the limits (b) Complied, emission is disposed through Stack (No. 1)
5	**For Hydrochloric Acid (HCl) Manufacturing (Stack MOC: FRP; Forced Draft):** (a) The emission arising from the HCl Tower shall be let out through stacks (No. 2) of heights 22.5 meters from ground level, respectively (b) The Chlorine and Acid Mist (HCl Mist) Concentration from the HCl Tower (Stack No. 2) shall not exceed 15 and 35 mg/Nm^3 respectively. *(EPA Notification [G.S.R. 913(E), dated 24.10.21989])*	(a) Complied, emission is let out through Stack (No. 2) (b) The Chlorine and Acid Mist (HCl Mist) Concentration are within the prescribed limits
6	**For Sodium Hypochlorite Manufacturing (Stack MOC: FRP; Forced Draft):** (a) The waste chlorine gas absorption system, *viz.*, Multistage (3 stage) Caustic Wet Scrubber and the Acid Mist absorption system, *viz.*, De mineralized Water Scrubber attached to the Caustic Soda Plant shall be operated at all times (b) Separate Energy Meter provided for the above said Air Pollution Control System shall be operated regularly and the readings of the same shall be recorded in a Log Book, which shall be produced, as an when called for, by the inspecting officials of this committee, at any point of time (c) The emission arising from the Hypo Tower shall be let out through stacks (No. 3) of heights 15 meters from ground level, respectively (d) The Chlorine and Acid Mist (HCl Mist) Concentration from the Hypo Tower (Stack No. 3), shall not exceed 15 and 35 mg/Nm^3 respectively. *(EPA Notification [G.S.R. 913(E), dated 24.10.1989])*	(a) The waste chlorine gas absorption system attached to the Caustic Soda Plant is operated at all times (b) Separate Energy Meter is provided for the Hypo Plant and readings are recorded in the Log Book regularly (c) The emission arising from the Hypo Tower is let out through Stack (No. 3) (d) The Chlorine and Acid Mist (HCl Mist) Concentration are within the prescribed limits

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7	For Ethylene di Chloride Manufacturing: (a) The Ethylene Gas (C_2H_4) shall be stored with utmost safely and precautions, as per the provisions of Acts and Rules, prevailing till date, as applicable	(a) Complied, Ethylene is stored in double walled storage tank with pressure/temperature monitoring system and dedicated fire hydrant/sprinkler
	(b) The Vent gases from Ethylene Storage Tank and System form Maintenance Operations of Cryogenic conditions shall e properly burnt using Smokeless Flare provided with the same	(b) Complied, forced draught flare with smokeless blower system is available
	(c) Adequate number of Ethylene Gas (C_2H_4) Sensors shall be provided around the Ethylene Gas (C_2H_4) Storage tank and Ethylene-Di-Chloride ($C_2H_4Cl_2$) plant and the same shall be closely monitored, to prevent any fire or explosion hazards	(c) Complied, 16 Nos. of Ethylene Gas Sensors are provided and are closely monitored
	(d) The un reacted gases consisting of Ethylene Gas (C_2H_4), Chlorine Gas (Cl_2) shall be scrubbed with Caustic Scrubber to remove excess Chlorine Gas (Cl_2) and then remaining un reacted Ethylene Gas (C_2H_4), shall be incinerated using Super Kerosene, maximum consumption of which shall not exceed 1000 LPD	(d) Complied, un reacted gases are scrubbed with Caustic Scrubber and remaining is incinerated regularly
	(e) Separate Energy Meter attached to Air Pollution Control Systems, *viz.*, Caustic Scrubber and the Incinerator shall be ensured for operability at all times and the Readings of the same shall be recorded in the Logbook. The Log Book shall be made available to the inspecting officials of this Committee, as and when called for	(e) Separate Energy Meter is provided for the Hypo Plant and readings are recorded in the Log Book regularly
	(f) The emission arising from the above shall be let out through a Stack (No. 4) of the height 30 meters from ground level	(f) The emission is let out through Stack (No. 4)
	(g) The Chlorine and Acid Mist (HCl Mist) Concentration from the above stack (No. 4) emission shall not exceed 15 and 35 mg/Nm^3 respectively. *(EPA Notification [G.S.R. 913(E), dated 24.10.1989])*	(g) The Chlorine and Acid Mist (HCl Mist) Concentration are within the prescribed limits

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For Boiler (IBR 8.0 TPH; Stack MOC: MS; Natural Draft):
(a) The fuel used in the Boiler shall be Low Sulphur Heavy Stock (LSHS) and / or Hydrogen Gas only
(b) The quantity of Low Sulphur Heavy Stock (LSHS) and Hydrogen Gas used shall not exceed 675 Kgs./Hr., and 50 Nm^3/Hr., respectively, at any point of time
(c) The emission arising from the boiler shall be let out through a Stack (No. 5) of height 45 meters from ground level (EPA Notification [GSR 176(E), 02.04.1996])
(d) The emissions arising of the above said Stack (No. 5) shall conform to the following prescribed standard limits: *(EP Amendment Notification [GSR 176 (E) dated 02.04.1996]), **(EP Amendment Rules, 2018, MoEF&CC Notification GSR 96 (E) dated 29.01.2018)
<table>
<tr><th rowspan="2">S. No.</th><th>Parameters</th><th colspan="2">Prescribed standard limits</th><th rowspan="2">Units</th></tr>
<tr><th>Fuel used</th><th>Hydrogen Gas</th><th>LSHS</th></tr>
<tr><td>1</td><td>Particulate Matter *</td><td>800</td><td>800</td><td>mg/Nm^3</td></tr>
<tr><td>2</td><td>Sulphur di oxide (SO_2) **</td><td>-</td><td>600 @ 3% dry O_2</td><td>mg/Nm^3</td></tr>
<tr><td>3</td><td>Oxides of Nitrogen (NO_x) **</td><td>-</td><td>300 @ 3% dry O_2</td><td>mg/Nm^3</td></tr>
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<td>
(a) Complied, LSHS is used as a fuel in the Boiler
(b)Complied, consumption quantity of LSHS are within the prescribed limits
(c) The emission arising from the boiler is let out through Stack (No. 5) of height 45 meters only
(d) Emissions arising from the Stack is maintained within the prescribed/standard limits
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<td>9</td>
<td>Natural Gas Based Captive Power Generation (2 X 8.5 MW; 1 No. Standby):
(a) The Power generation capacity of the above Power Generators shall not exceed 8.5 MW, as permitted by this Committee, at any point of time
(b) The fuel used in the power generators shall be Natural gas only
(c) The fuel used in the power generator shall be let out through a Stack (No. 6) of height 30 meters from ground level
(d) The emissions arising of the above said Stack (No. 6) shall conform to the following standard limits (EP Amendment Rules, 2015, MoEF&CC - No. s.O.3305 (E) dated 07.12.2015)
<table>
<tr><th rowspan="2">S. No.</th><th>Parameters</th><th colspan="2">Prescribed standard limits</th><th rowspan="2">Unit</th></tr>
<tr><th>Generator installation date</th><th>November 2004</th><th>May 2018</th></tr>
<tr><td>1</td><td>Particulate Matter</td><td>50</td><td>30</td><td>mg/Nm^3</td></tr>
<tr><td>2</td><td>Sulphur di oxide (SO_2)</td><td>600</td><td>100</td><td>mg/Nm^3</td></tr>
<tr><td>3</td><td>Oxides of Nitrogen (NO_x)</td><td>300</td><td>100</td><td>mg/Nm^3</td></tr>
<tr><td>4</td><td>Mercury</td><td>0.03</td><td>0.03</td><td>mg/Nm^3</td></tr>
</table>
</td>
<td>(a) Compiled, the power generation capacity will not exceed 8.5 MW at any point
(b) Complied, generator is operated in Natural Gas only
(c) Complied, emission is let out through Stack (No. 6) only
(d) Emissions arising from the Stack is conforming to the prescribed/standard limits</td>
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<tr>
<td>10</td>
<td>For Waste Heat Recovery Boiler (IBR 4.8 TPH; Stack MOC: CS; Natural Draft):
(a) The fuel used in the Boiler shall be the Flue Gas from the Natural Gas Based Power Generator only

(b) The emission arising from the boiler shall be let out through a Stack (No. 7) of height 30 meters from ground level *(EP Amendment Notification [GSR 176 (E) dated 02.04.1996])
(c) The emissions arising of the above said Stack (No. 7) shall conform to the standard limits prescribed, vide Sub-Clause (d) of the Clause 8 of Section V of this Consent Order</td>
<td>(a) Complied, the fuel used in the Boiler is the Flue Gas from the Power Generator
(b) The emission arising from the boiler is let out through Stack (No. 7) of height 30 meters
(c) Emissions arising from the Stack is conforming to the standard limits</td>
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For DG Sets (1 X 600, 1 X 500, 1 X 400, 1 X 180 and 1 X 82.5; in KVA):
(a) Diesel Consumption proposed for the above said DG Set shall not exceed 1000 LPH
(b) The unit shall comply with the standards for Diesel Generators notified under Environment (Protection) Rules, 1986, as amended till date, read with the Final Guidelines for in-use generator sets, issued by the National Green Tribunal, New Delhi, on behalf of the Central Pollution Control Board, New Delhi (Appeal No. 12 (THC) of 2013, O.A.No. 17 (THC) and 32 (THC) of 2013)
(c) Noise from the D.G. Set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, as notified under the provisions of the Environment (Protection) Act, 1986 (GSR 7, dated 22.12.1998)
(d) The unit shall provide facilities for collection and storage, of the waste oil, waste oil filters and oil containing sludge resulting from the cleaning of Oil Filters/Fuel Tanks/fuel pipelines, of the above said DG Sets, for disposal as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019, as amended till date and time to time
(e) The Stack Height of the above DG Sets, shall be at least 5.0 meters, 4.5 meters, 4 meters, 3.0 meters and 2.0 meters, for above mentioned capacities, respectively, over and above the height of the building, where the DG sets are installed (Emission Regulations Part IV:COINDS/26/1986-87)
(f) The emissions arising out of the Stacks (Stack Nos. 8, 9, 10, 11 & 12), shall not exceed the following prescribed standards (G.S.R. 771 (E): EP (III) A Rules, 2013):
<table>
<tr><th>S. No.</th><th>Parameters</th><th>Standard Limits</th><th>Unit</th></tr>
<tr><td>1</td><td>Oxides of Nitrogen + Hydrocarbon (NOx + HC)</td><td>≤ 4.0</td><td>g/kW-hr</td></tr>
<tr><td>2</td><td>Carbon monoxide (CO)</td><td>≤ 3.5</td><td>g/kW-hr</td></tr>
<tr><td>3</td><td>Particulate Matter (PM)</td><td>≤ 0.2</td><td>g/kW-hr</td></tr>
<tr><td>4</td><td>Smoke Limit (Light Absorption Co-efficient)</td><td>≤ 0.7</td><td>m^{-1}</td></tr>
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<td>
(a) Complied, consumption is within the limits
(b) Agree to comply in a phased manner
(c) Complied, all DG sets are providing with the required acoustic enclosure
(d) Hazardous wastes handling, storage and disposal are done as per the provisions of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment, Rules, 2019
(e) Required stack heights are maintained for all DG Sets
(f) Emissions arising from the Stacks are conforming to the prescribed standards
</td>
</tr>
<tr>
<td>12</td>
<td>
Marine Terminal Facility (Max. Draft of 6.9 meters; Max. LOA:148 meters):
(a) Adequate number of Ethylene Gas (C_2H_4) Sensors shall be
</td>
<td>
(a) 16 Nos. of Ethylene sensors
</td>
</tr>
</table>

	provided around the Marine Terminal Facility and the same shall be closely monitored, to prevent any fire or explosion hazards (b) There shall be no spillage of Caustic Soda Lye or any kind of Oil from moored ship, into the coastal waters. If any spillage occurs, at any point of time, the cleaning of the same, completely and disposal of the spilt oil is the sole responsibility of the unit (c) If any reversible and/or irreversible environmental damage or degradation occurs due to the operation of the Marine Terminal Facility, the unit is liable to carry out the rehabilitation of the damaged environment on the own cost and/or to bear the cost of the same, payable as environmental compensation, to this Committee, which may be worked out, specific to the occurrences of event (d) The unit shall procure and keep the Oil Spill Tier I Equipments ready to be deployed, at any point of time, if any such spills occur (e) The unit shall notify this Committee, the details of the Ship and Shipment, as and when calls are proposed (f) The unit shall comply with the conditions imposed by the Ministry of Environment, Forest and Climate Change, New Delhi, in its Environment Clearance and copy of the compliance report shall be submitted, to this Committee also, as and when submitted to the Ministry	are provided across the facility and the same are closely monitored (b) Complied, no spillages arise. If any occurs in future, the cleaning of the same is the sole responsibility of our unit (c) Agree to comply if any reversible and/or irreversible environmental damage occurs due to the operation of the Marine Terminal Facility (d) All required Oil Spill Contingency Equipments are available and in ready to deploy condition during any spill (e) Complied, all shipment details are communicated regularly to your good office (f) Complied to all the conditions of MoEF&CC and copy of the reports are submitted to PPCC regularly
13	The ambient air quality within the premises shall not exceed the following standards *(EPA Notification: GSR 176 (E) dated 02.04.1996):* PM10 - 100 ug/m3 SO2 - 80 ug/m3 NOx - 80 ug/m3 CO - 5000 ug/m3 Chlorine - 30 ug/m3 HCl Mist - 70 ug/m3	Complied to ambient air quality standards at all times
14	The noise level at the boundary shall not exceed 75 and 70 dB (A) during day and night time respectively *(EPS Notification: G.S.R. 1063(E), dated 26.12.1989)*	The noise level at the boundary are within the prescribed limits
15	For Online Continuous Emission Monitoring System: (a) The unit shall ensure the connectivity and maintain the	(a) Complied, OCEMS are

CHEMPLAST SANMAR LTD MELAVANJORE

	Online Continuous Emission Monitoring System (OCEMS), as per the guidelines of the CPCB, regularly, for seamless transfer of data, of the 16 Nos. of strategically placed Ambient Chlorine Sensors, Chlorine Sensors at the Stacks, ETP Inlet and Outlet totalizer and the Particulate Matter, Sulphur di oxide and Oxides of Nitrogen from the Boilers, etc., to the servers of this Committee, which is viewable via *https://ppcc.glensserver.com /PPCC_ONLINE/inde.html* and the CPCB, New Delhi, without interruption, synced in Cloud based system, of the Glens Server (b) The unit shall ensure raising and receipt of SMS and Email alerts to the corresponding officials of this Committee, as per the above said guidelines of the CPCB, New Delhi. Email Alerts for exceedances shall be notified to *ppcc.pon@nic.in, ssodste.py@gov.in and je3dste.py@gov.in*	maintained as per CPCB Guidelines. Our CARE Air system is in continuous connection with the PPCC/CPCB servers through Glens/ENVEA servers (b) Notifications are sent to all required officials through E.Mail whenever there is any disturbances/exceedances in the CARE Air System
16	Coast Guard Oil Spill Contingency Plan (OSCP) shall be strictly adhered to	Complied
17	The unit shall obtain ISO: 9001. ISO: 14001 and ISO: 18001 and shall strictly adhere to the norms	Complied, we are IMS Certified Company
18	**For Storage Tanks:** Caustic Soda Lye, Sulphuric Acid shall be stored appropriately, provided with adequate safety measures, such as, dyke walls, forming an outer concentric tank, provided with anticorrosive impervious flooring, of capacity at least 1.5 times the capacity of the respective storage tank, to avoid contamination of surround land, in case of any failure of tank structures or leaks occurs	Complied, all dyke walls of storage tanks are built as per the said requirement to avoid contamination of land and to withstand any failure of tank structures or leaks
19	**For Hazardous Wastes:** The Hazardous Wastes, generated from the unit, *viz.*, the waste oil, Oil Soaked Cotton Wastes, Waste Oil Filters and Oil containing sludge resulting from the cleaning of Oil Filters/Fuel Tanks/fuel pipelines, of the Power Generator and the DG Sets and other Hazardous Wastes, shall be collected and stores appropriately, as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019, as amended till date and time to time	Hazardous wastes handling, storage and disposal are done as per the provisions of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment, Rules, 2019 only

Water Consent Order (To Operate & Renewal)

No. PPCC/CTOR/WTR/TRP/KKL/JE/2019/852 dated 20 NOV 2019

<table>
<tr><td>#</td><td>Conditions specified in Consent Order</td><td>Compliance status</td></tr>
<tr><td>V</td><td>Specific Conditions</td><td></td></tr>
<tr><td>1</td><td>Water Requirement and Discharge quantities permitted:
(a) The Maximum water requirement of the unit and the permitted water discharge quantities shall not exceed the following (in KLD):
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Particulars</th><th colspan="2">For Caustic Soda and other By-products Manufacturing</th><th colspan="2">For Ethylene Di Chloride Manufacturing</th></tr>
<tr><th>Requirement</th><th>Discharge</th><th>Requirement</th><th>Discharge</th></tr>
<tr><td>1</td><td>Domestic</td><td>10.0</td><td>8.0</td><td>5.0</td><td>4.0</td></tr>
<tr><td>2</td><td>Industrial</td><td>900.0</td><td>14.0</td><td>835.0</td><td>71.0</td></tr>
<tr><td>3</td><td>Total</td><td>910.0</td><td>22.0</td><td>840.0</td><td>75.0</td></tr>
</table></td><td>Complied, water requirement and the discharge quantities are within the said limits</td></tr>
<tr><td>2</td><td>For Caustic Soda and other By-products Manufacturing:
(a) The water requirement shall be met out from the existing PASIC Borewell at the premises of the unit and the water drawl capacity shall not exceed 650 KLD
(b) The unit shall maintain the Flow Meter attached to the Borewell and the readings of the same shall be recorded in a logbook, which shall be made available to the inspecting officials, as and when called for</td><td>(a) Complied, drawl does not exceed 650 KLD from the PASIC Borewell
(b) Flow meters are installed and readings are recorded in a log book</td></tr>
<tr><td>3</td><td>For Ethylene Di Chloride Manufacturing:
(a) The water requirement shall be met out from the existing Desalination Plant at the premises of the unit

(b) The Desalination Plant shall be maintained regularly for reducing the quantity of reject water and for power economy</td><td>(a) The water needed is met out from existing Desalination Plant
(b) Complied, plant is maintained regularly</td></tr>
<tr><td>4</td><td>Reverse Osmosis Plant (260 KLD Raw Water handling capacity):
(a) The Raw Water consumption for the R.O Plant shall not exceed 260 KLD. Domestic Water requirements of the entire plant and the Colony shall be met out from the same
(b) The Reject of the RO Plant, generated to a quantum of 70 KLD, shall be recycled to the Desalination Plant and shall not be discharged, in and around the premise of the unit, at any point of time</td><td>(a) Complied, consumption is within the prescribed limits
(b) ZLD system is maintained regularly</td></tr>
</table>

CHEMPLAST SANMAR LTD MELAVANJORE

<table>
<tr>
<td>5</td>
<td>
For Desalination Plant (3000 KLD Sea Water handling capacity):
(a) The Sea Water consumption for the Desalination Plant shall not exceed 3000 KLD. The utility water requirement for the entire plant shall be met out from the same

(b) The Reject of the Desalination Plant, generated to a quantum of 1800 KLD, shall be let into the Back Waters of the Paravadayan River, using appropriate diffusers, at the appropriate dilution levels

(c) The quality of the Reject water shall conform the following standards (EPS, 1986[GSR 7, dated 22.12.1998]):
<table>
<tr><th>S.No.</th><th>Parameters</th><th>Standard Limits</th><th>Unit</th></tr>
<tr><td>1</td><td>pH</td><td>6.5-8.5</td><td>-</td></tr>
<tr><td>2</td><td>Dissolved Oxygen (DO)</td><td>5.0</td><td>mg/l</td></tr>
<tr><td>3</td><td>Colour and Odour</td><td>No Noticeable colour and odour</td><td>-</td></tr>
<tr><td>4</td><td>Floating Material</td><td>No Obnoxious or detrimental for use purpose</td><td>-</td></tr>
<tr><td>5</td><td>Suspended Solids</td><td>None from the Sewage and /or Industrial Origin</td><td>-</td></tr>
<tr><td>6</td><td>Oil and Grease</td><td>0.1</td><td>mg/l</td></tr>
<tr><td>7</td><td>Mercury (As Hg)</td><td>0.1</td><td>mg/l</td></tr>
<tr><td>8</td><td>Lead (As Pb)</td><td>0.1</td><td>mg/l</td></tr>
<tr><td>9</td><td>Cadmium (As Cd)</td><td>0.1</td><td>mg/l</td></tr>
</table>
</td>
<td>(a) Water consumption for the Desalination Plant does not exceed 3,000 KLD
(b) Complied, reject water of the Desalination Plant is let out in the given area using appropriate diffusers
(c) Reject water quality is maintained & monitored as per the given standards</td>
</tr>
<tr>
<td>6</td>
<td>For Hazardous Wastes:
The used/worn out Filters of the RO Plant and the Desalination Plant shall be collected and stored, as per the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment, Rules, 2019, as amended till date. The disposal of the above said Filters shall be carried out through Authorized Recyclers only and shall not be disposed in and around the premises of the unit, at any cost</td>
<td>Agree to comply</td>
</tr>
<tr>
<td>7</td>
<td>The cooling/scrubbing water wherever necessary shall be recycled</td>
<td>Complied, ZLD system is maintained</td>
</tr>
<tr>
<td>8</td>
<td>There should be no effluent discharge from the process and shall maintain Zero Liquid Discharge</td>
<td>Complied, ZLD is operated efficiently and there is no effluent discharge from process</td>
</tr>
</table>

CHEMPLAST SANMAR LTD MELAVANJORE

COMPLIANCE REPORT TO THE CONDITIONS SPECIFIED IN PPCC - CONSENT ORDER (TO OPERATE & RENEWAL)

Air Consent Order (To Operate & Renewal)

No. PPCC/CTOR/AIR/TRP/KKL/JE/2019/851 dated 20 NOV 2019

#	Conditions specified in Consent Order	Compliance status
VI 1	Report Submissions: The unit shall submit Environment Statement in prescribed Form V, for the year ending March of every year, as imposed by the Environment (Protection) rules, 1986, as amended till date, to this committee, on or before 30th September of every year	Complied, last Environment Statement - Form V was submitted on 12 SEP 2024 (Ref. No.: CSL/KKL/EN/F5/2024/SEP/379)
VII 1	General Conditions: Notwithstanding anything contained in this consent, the Puducherry Pollution Control Committee hereby reserves its right and power under Section 21(4) of the Air (Prevention and Control of Pollution) Act, 1981 to review /revoke any or all conditions imposed herein and to cancel, refuse, modify or stipulate additional conditions for the purpose of the Act by the Committee, if conditions of the consent granted are not fulfilled	Agree to comply
2	Puducherry Pollution Control Committee reserves the right to revoke this clearance, if implementation of any of the conditions stipulated above is violated	Agree to comply
3	The applicant shall not undertake any expansion, modernization, diversification, change of location, change of process, change of products etc., without the prior approval/clearance from this authority	Agree to comply, prior approval/clearance will be obtained from the authority for any expansion, modernization, diversification, change of location, change of process, change of products etc.
4	The applicant shall take all possible measures to create pollution free surroundings	Complied, possible measures are taken in regular basis to create pollution free surrounding
5	The application for Air Consent Order (Renewal) shall be made at least 30 days before the date of expiry of this Consent Order. This Consent Order shall be exhibited in the office room and must be available to the inspecting officers of this Committee	Agree to comply. Consent Order is exhibited in the office room and is available for the inspecting officers of the Committee
6	Housekeeping shall be maintained clean	Complied, regular housekeeping done
7	All the conditions shall be enforced under the provisions of the Environment (Protection) Act, 1986, along with its amendments, from time to time	Agree to comply

CHEMPLAST SANMAR LTD. MELAVANJORE

8	The unit shall regularly conduct On-site and Off-site Emergency Mock Drills, as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989	Complied, On-site Emergency Mock Drill was done on 29 AUG 2024 & Off-site Emergency Mock Drill was done on 15 FEB 2024
VIII 1	Better Environmental Management Practices: Energy Conservation Measures like installation of LED's for lighting the areas inside and outside the buildings shall be adopted. Used CFL's/TFL's/and LED's should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid toxic contamination	Agree to comply. 167 Nos. of LED lights has been installed FY2024-25 & the energy conserved is 36,837 units
2	Use of Solar Panels may be adopted to a maximum extent possible, especially for street lights within the campus	Agree to comply
3	Energy Audit and annual reduction to be planned and intimated to this committee	Agree to comply, Energy Audit was lastly done by M/s. NIN Energy India Private Limited from 07.12.2021 to 11.12.2021
4	Appropriate Rain Water Harvesting Structures and Farm Ponds shall be established on scientific basis	Agree to comply
5	The unit shall declare itself and "Single Used Plastic Free Zone" and maintain the same in compliance with the Notification issued by this Committee on Ban of Single Use Plastics, G.O. Ms. No. 18/Envt./2019 dated 30.07.2019, published in the Gazette of Puducherry, Part I Extraordinary, dated 02.08.2019	Agree to comply
IX	Implementation Schedule: The unit shall collect the samples of the Sludge and analyze the same in NABL Accredited Laboratory for its Hazardous/Non-hazardous nature and shall submit the report on or before 31.12.2019	Complied, Sludge analysis report submitted on 31 DEC 2019 (Ref. No.: CSL/KKL/Cons-Air -Comply/2019-2020)

CHEMPLAST SANMAR LTD MELAVANJORE

Water Consent Order (To Operate & Renewal)

No. PPCC/CTOR/WTR/TRP/KKL/JE/2019/852 dated 20 NOV 2019

#	Conditions specified in Consent Order	Compliance status
VI 1	Report Submissions: The unit shall submit Environment statement in prescribed Form V, for the year ending March of every year, as imposed by the Environment (Protection) rules, 1986, as amended till date, to this committee, on or before 30th September of every year	Complied, last Environment Statement - Form V was submitted on 12 SEP 2024 (Ref. No.: CSL/KKL/EN/F5/2024/SEP/379)
VII 1	General Conditions: Notwithstanding anything contained in this consent, the Puducherry Pollution Control Committee hereby reserves its right and power under Section 21(4) of the Air (Prevention and Control of Pollution) Act, 1981 to review /revoke any or all conditions imposed herein and to cancel, refuse, modify or stipulate additional conditionsfor the purpose of the Act by the Committee, if conditions of the consent granted are not fulfilled	Agree to comply
2	Puducherry Pollution Control Committee reserves the right to revoke this clearance, if implementation of any of the conditions stipulated above is violated	Agree to comply
3	The applicant shall make an application for renewal of consent in the prescribed form at least 30 days before the date of expiry of this Consent Order or 30 days before the new or altered outlet is proposed to be commissioned and/or a new discharge is proposed to be made, whichever is earlier	Agree to comply
4	The applicant shall not undertake any expansion, modernization, diversification, change of location, change of process, change of products etc., without the prior approval/clearance from this authority	Agree to comply, prior approval/clearance willbe obtained from the authority for any expansion, modernization, diversification, change of location, change of process, change of products etc.,
5	The applicant shall take all possible measures to create pollution free surroundings	Complied, possible measures are taken in regular basis to create pollution free surrounding
6	This Consent Order shall be exhibited in the office room and must be available to the inspectingofficers of this Committee	Consent Order is exhibited in the office room and is available for the inspecting officers ofthe Committee

7	Housekeeping shall be maintained clean	Complied, regular housekeeping done
8	All the conditions shall be enforced under the provisions of the Environment (Protection) Act, 1986, along with its amendments, from time to time	Agree to comply
9	The unit shall regularly conduct On-site and Off-site Emergency Mock Drills, as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989	Complied, On-site Emergency Mock Drill was done on 29 AUG 2024 & Off-site Emergency Mock Drill was done on 15 FEB2024
VIII 1	Better Environmental Management Practices: Energy Conservation Measures like installation of LED's for lighting the areas inside and outside the buildings shall be adopted. Used CFL's/TFL's/and LED's should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid toxic contamination	Agree to comply. 167 Nos. of LED lights has been installed FY2024-25 & the energy conserved is 36,837 units
2	Use of Solar Panels may be adopted to a maximum extent possible, especially for street lights within the campus	Agree to comply
3	Energy Audit and annual reduction to be planned and intimated to this committee	Agree to comply, Energy Audit was lastly done by M/s. NIN Energy India Private Limited from 07.12.2021 to 11.12.2021
4	Appropriate Rain Water Harvesting Structures and Farm Ponds shall be established on scientific basis	Agree to comply
5	The unit shall declare itself and "Single Used Plastic Free Zone" and maintain the same in compliance with the Notification issued by this Committee on Ban of Single Use Plastics, G.O. Ms. No. 18/Envt./2019 dated 30.07.2019, published in the Gazette of Puducherry, Part I Extraordinary, dated 02.08.2019	Agree to comply
IX	Implementation Schedule: The unit shall install a dedicated STP to collect and treat the domestic waste water on or before 31.03.2020 and Action Taken report shall be submitted to this Committee	Complied, dedicated STP installed to collect and treat the domestic waste water and action taken report submitted on 15 FEB 2022 (Ref. No.: CSL/KKL/EN/STP/2022/FEB/97)

A2

Gaseous Emission Data - APR 24 to SEP 24

Process Stacks						
Hypo & HCl Tower						
Parameters	APR	MAY	JUN	JUL	AUG	SEP
Cl2, mg/Nm3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
HCL, mg/Nm3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
EDC Incinerator						
Cl2, mg/Nm3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
HCL, mg/Nm3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
Ethylene , mg/m3	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)
EDC, mg/m3	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)	BDL (DL 0.1)

** Sample reports attached*

CHEMPLAST SANMAR LTD MELAVANJORE

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

Test Report No. : ICE-2410040008

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010008		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: HCL Tower	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.4"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 17.2"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 27.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**General Parameters**			
a.	Acid Mist (HCl), mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	35 Max
b.	Chlorine, mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	15 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; Instrument Used: Stack Sampler, Flue gas Analyzer

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

Test Report No. : ICE-2410040009

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010009		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: Hypo Tower	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.6"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 17.4"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 27.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**General Parameters**			
a.	Acid Mist (HCl), mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	35 Max
b.	Chlorine, mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	15 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; Stack Sampler.
REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

Report No. : ICE-2410040010

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010010		
Sample Description*	: Stack Emission	Received On	: 01-10-2024
Sample Location	: Ethylene Di Chloride - Incinerator	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 46.8"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 12.8"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 27.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**General Parameters**			
a.	Acid Mist (HCl), mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	35 Max
b.	Ethylene Di Chloride, mg/Nm³	ITC/CHN/GSOP/044	BDL(DL 0.1)	Not Specified
c.	Ethylene, mg/Nm³	ITC/CHN/GSOP/044	BDL(DL 0.1)	Not Specified
d.	Chlorine, mg/Nm³	USEPA Method 26A	BDL(DL 1.0)	15 Max

'*' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; Stack Sampler.
REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Division

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

A3

Environment Monitoring Data - APR 24 to SEP 24

Ambient Air Quality Monitoring

Locations: Main Gate - PVC Plant, HCl/Hypo, Flaker/STP, Desalination Plant, Ethylene Storage, Main Gate - ICD Plant, CPP-2
(Maximum values recorded is given below)

Parameters	APR	MAY	JUN	JUL	AUG	SEP
SO2, ug/m3	9.45	9.41	8.94	8.71	9.24	9.02
NO2, ug/m3	36.38	25.95	24.31	21.21	24.68	22.5
PM10, ug/m3	72.23	70.29	71.59	66.59	73.64	70.58
PM 2.5, ug/m3	32.43	33.26	33.26	30.77	35.34	33.26
O3, ug/m3	17.5	17.04	17.49	16.69	17.4	17.46
Pb, ug/m3	BDL (DL 0.02)	BDL (DL 0.02)	BDL (DL 0.02)	BDL (DL 0.02)	BDL (DL 0.02)	BDL (DL 0.02)
NH3, ug/m3	9.5	9.22	9.38	8.65	9.05	8.78
C6H6, ug/m3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
Benzo / Pyrene, ng/m3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
As, ng/m3	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)
Ni, ng/m3	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)	BDL (DL 2.0)
Acid Mist/HCl, ug/m3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
CO, ug/m3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)
Cl2, ug/m3	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)	BDL (DL 1.0)

Stack Monitoring - Captive Power Plants

Locations: Waste Heat Recovery Boiler – CPP 1 & CPP 2
(Maximum values recorded is given below)

Velocity, m/s	10.1	9.9	9.9	9.5	8.7	9
PM, mg/m3	17.18	18.31	16.81	14.42	16.05	18.15
SO2, mg/m3	21.8	27.45	21.98	16.57	22.14	24.74
Nox, mg/Nm3	61.2	64.24	52.51	44.05	61.77	73.14
CO2, %	7	7.2	7.1	5.8	7.2	7.3
O2, %	11.1	11.7	11.3	12.1	12	12.6
Stack temperature, oC	248	257	136	181	167	182
Flow rate, Nm3/hr	17,752	17,220	20,211	16,950	16,919	16,566
CO, mg/Nm3	BDL (DL 0.2)	BDL (DL 0.2)	BDL (DL 0.2)	BDL (DL 0.2)	BDL (DL 0.2)	BDL (DL 0.2)
Mercury, mg/Nm3	BDL (DL 0.01)	BDL (DL 0.01)	BDL (DL 0.01)	BDL (DL 0.01)	BDL (DL 0.01)	BDL (DL 0.01)

Stack Monitoring - DG Sets

Locations: 600, 500, 600 (New), 180, 82.5 KVA
(Maximum values recorded is given below)

Velocity, m/s	10.4	9.9	10	10.9	9.9	10.6
SO2, mg/Nm3	BDL (DL 4.0)	BDL (DL 4.0)	BDL (DL 4.0)	BDL (DL 4.0)	0	BDL (DL 4.0)
CO2, %	3	3.4	3	2.8	2.9	3.3
O2, %	17	16.1	16.4	17.1	17.2	16.8
Stack temperature, oC	136	134	129	124	99	119
Flow rate, Nm3/hr	904	809	468	1,426	227	871
PM, g/kw-hr	0.08	0.06	0.08	0.1	0.13	0.07
Nox + HC, g/kw-hr	0.58	0.55	0.7	1.06	0.85	0.63
CO, g/kw-hr	0.54	0.34	0.52	0.9	0.97	0.47
Smoke limit, m-1	0.3	0.3	0.3	0.3	0.3	0.3

Stack Monitoring - Boiler

Location: 8 TPH (LSHS fired Boiler)
(Maximum values recorded is given below)

Velocity, m/s	9	No operation	No operation	No operation	No operation	No operation
PM, mg/m3	22.29					
SO2, mg/m3	139					
Nox, mg/Nm3	75.43					
CO2, %	9.5					
O2, %	9					
Stack temperature, oC	187					
Flow rate, Nm3/hr	5,900					
CO, mg/Nm3	0					
Mercury, mg/Nm3	0					

** Sample reports attached*

GLAST SANMAR LTD CHENNAI MELAVANJORE

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040002 (1)

NABL ULR No. : TC695224000016305F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010002		
Sample Description*	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Top of the Canteen	Commenced On	: 01-10-2024
Latitude	: N 10°50' 50.3"	Completed On	: 04-10-2024
Longitude	: E 079°50' 13.7"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/ 28/09/2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
a.	Sulphur Dioxide (SO2), µg/m3	IS 5182 (Part-2)	9.02	80 Max
b.	Nitrogen Dioxide (NO2), µg/m3	IS 5182 (Part-6)	22.50	80 Max
c.	Particulate Matter (PM10), µg/m3	IS 5182 (Part-23)	70.58	100 Max
d.	Particulate Matter (PM 2.5), µg/m3	IS 5182 (Part-24)	33.26	60 Max

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

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Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040002 (1)

NABL ULR No. : TC695224000016305F

ORIGINAL

e.	Ozone (O3), µg/m3	IS 5182 (Part-9)	17.46	180 Max
f.	Lead (Pb), µg/m3	IS 5182 (Part-22)	BDL (DL: 0.02)	1 Max
g.	Ammonia (NH3), µg/m3	IS 5182 (Part-25)	8.78	400 Max
h.	Benzene (C6H6),µg/m3	IS 5182 (Part-11)	BDL (DL: 1.0)	5 Max
i.	Benzo (a) Pyrene(Particulate Phase only), ng/m3	IS 5182 (Part-12)	BDL (DL: 1.0)	1 Max
j.	Arsenic (As), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	6 Max
k.	Nickel (Ni), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	20 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

ORIGINAL

Test Report No. : ICE-2410040002 (2)

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010002		
Sample Description#	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Top of the Canteen	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 50.3"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 13.7"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28/09/2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
l.	Carbon Monoxide (CO), mg/m3	IS 5182 (Part-10)	BDL (DL 1.0)	2 Max/5 Max
m.	Chlorine (Cl_2), µg/m³	ITC/CHN/GSOP/044	BDL (DL 1.0)	30 Max
n.	Acid Mist (HCl), µg/m³	ITC/CHN/GSOP/044	BDL (DL 1.0)	70 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

Verified by

*******End Of Report*******

Authorized by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
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Interstellar Testing Centre Private Limited

Since 1988

TC - 6952

TEST REPORT

Test Report No. : ICE-2410040003 (1)

NABL ULR No. : TC695224000016304E

ORIGINAL

Issued To

M/s.Chemplast sanmar Limited.,

315, Melavanjore, Nagore Post, Karaikal Region,
Puducherry, India

Sample Registration No.	: E02-2410010003		
Sample Description*	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: ICD Plant (Near CPP-2)	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.03"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 12.15"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/ 28/09/2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
a.	Sulphur Dioxide (SO2), µg/m3	IS 5182 (Part-2)	8.31	80 Max
b.	Nitrogen Dioxide (NO2), µg/m3	IS 5182 (Part-6)	21.19	80 Max
c.	Particulate Matter (PM10), µg/m3	IS 5182 (Part-23)	68.05	100 Max
d.	Particulate Matter (PM 2.5), µg/m3	IS 5182 (Part-24)	31.60	60 Max

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environmental Section

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

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e.	Ozone (O3), µg/m3	IS 5182 (Part-9)	16.74	180 Max
f.	Lead (Pb), µg/m3	IS 5182 (Part-22)	BDL (DL: 0.02)	1 Max
g.	Ammonia (NH3), µg/m3	IS 5182 (Part-25)	8.46	400 Max
h.	Benzene (C6H6),µg/m3	IS 5182 (Part-11)	BDL (DL: 1.0)	5 Max
i.	Benzo (a) Pyrene(Particulate Phase only), ng/m3	IS 5182 (Part-12)	BDL (DL: 1.0)	1 Max
j.	Arsenic (As), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	6 Max
k.	Nickel (Ni), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	20 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*******End Of Report*******

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Station

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

Test Report No. : ICE-2410040003 (2)

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
Puducherry, India.

Sample Registration No.	: ICE-2410010003		
Sample Description#	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: ICD Plant (Near CPP-2)	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.03"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 12.15"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28/09/2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
l.	Carbon Monoxide (CO), mg/m3	IS 5182 (Part-10)	BDL (DL 1.0)	2 Max/5 Max
m.	Chlorine (Cl_2), µg/m³	ITC/CHN/GSOP/044	BDL (DL 1.0)	30 Max
n.	Acid Mist (HCl), µg/m³	ITC/CHN/GSOP/044	BDL (DL 1.0)	70 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHI
Assistant Manager
Environmental Science

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1968

TC - 6952

Test Report No. : ICE-2410040004 (1)

NABL ULR No. : TC695224000016303F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010004		
Sample Description*	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Near Desalination Plant	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 57.2"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 22.0"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/ 28-09-2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
a.	Sulphur Dioxide (SO2), µg/m3	IS 5182 (Part-2)	8.12	80 Max
b.	Nitrogen Dioxide (NO2), µg/m3	IS 5182 (Part-6)	19.63	80 Max
c.	Particulate Matter (PM10), µg/m3	IS 5182 (Part-23)	62.24	100 Max
d.	Particulate Matter (PM 2.5), µg/m3	IS 5182 (Part-24)	28.69	60 Max

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
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Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040004 (1)

NABL ULR No. TC695224000016303F

ORIGINAL

e.	Ozone (O3), µg/m3	IS 5182 (Part-9)	16.02	180 Max
f.	Lead (Pb), µg/m3	IS 5182 (Part-22)	BDL (DL: 0.02)	1.0 Max
g.	Ammonia (NH3), µg/m3	IS 5182 (Part-25)	7.88	400 Max
h.	Benzene (C6H6),µg/m3	IS 5182 (Part-11)	BDL (DL: 1.0)	5 Max
i.	Benzo (a) Pyrene(Particulate Phase only), ng/m3	IS 5182 (Part-12)	BDL (DL: 1.0)	1 Max
j.	Arsenic (As), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	6 Max
k.	Nickel (Ni), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	20 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Checked by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1986

Test Report No. : ICE-2410040004 (2)

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010004		
Sample Description*	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Near Desalination Plant	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 57.2"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 22.0"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/ 28-09-2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
l.	Carbon Monoxide (CO), mg/m³	IS 5182 (Part-10)	BDL (DL: 1.0)	2 Max/5 Max
m.	Chlorine (Cl_2), µg/m³	ITC/CHN/GSOP/044	BDL (DL: 1.0)	30 Max
n.	Acid Mist (HCl), µg/m³	ITC/CHN/GSOP/044	BDL (DL: 1.0)	70 Max

'*' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TC - 6952

TEST REPORT

Test Report No. : ICE-2410040005 (1)

NABL ULR No. : TC695224000016302F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010005		
Sample Description*	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Near Ethylene Storage	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 52.73"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 20.21"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference*	: Test Request Form/ 28-09-2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
a.	Sulphur Dioxide (SO2), µg/m3	IS 5182 (Part-2)	7.60	80 Max
b.	Nitrogen Dioxide (NO2), µg/m3	IS 5182 (Part-6)	18.91	80 Max
c.	Particulate Matter (PM10), µg/m3	IS 5182 (Part-23)	60.26	100 Max
d.	Particulate Matter (PM 2.5), µg/m3	IS 5182 (Part-24)	27.86	60 Max

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
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e.	Ozone (O3), µg/m3	IS 5182 (Part-9)	16.22	180 Max
f.	Lead (Pb), µg/m3	IS 5182 (Part-22)	BDL (DL: 0.02)	1.0 Max
g.	Ammonia (NH3), µg/m3	IS 5182 (Part-25)	7.61	400 Max
h.	Benzene (C6H6),µg/m3	IS 5182 (Part-11)	BDL (DL: 1.0)	5 Max
i.	Benzo (a) Pyrene(Particulate Phase only), ng/m3	IS 5182 (Part-12)	BDL (DL: 1.0)	1 Max
j.	Arsenic (As), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	6 Max
k.	Nickel (Ni), ng/m3	USEPA Method IO 3.4	BDL (DL: 2.0)	20 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SARATHY
Assistant Manager
Environmental Science

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Test Report No. : ICE-2410040005 (2)

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010005		
Sample Description#	: Ambient Air Monitoring	Received On	: 01-10-2024
Sample Location	: Near Ethylene Storage	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 52.73"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 20.21"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28-09-2024		
Test Report as per	: NAAQ Norms		

Sampling Information

Date of Monitoring	: 27.09.24-28.09.24
Duration of Monitoring, minutes	: 1440
Avg. Ambient Temperature, °C	: 32
Avg. Relative Humidity, %	: 63
Sky Appearance	: Clear Sky

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
	Ambient Air Quality Parameters			
l.	Carbon Monoxide (CO), mg/ m^3	IS 5182 (Part-10)	BDL (DL 1.0)	2 Max/5 Max
m.	Chlorine (Cl_2), µg/m^3	ITC/CHN/GSOP/044	BDL (DL 1.0)	30 Max
n.	Acid Mist (HCl), µg/m^3	ITC/CHN/GSOP/044	BDL (DL 1.0)	70 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit; NAAQ: National Ambient Air Quality. Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS), Multi-gas Analyzer, Low Volume Air Sampler.

REMARKS : The above sample complies with NAAQ norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TC - 6952

TEST REPORT

Test Report No. : ICE-2410040011 ORIGINAL

NABL ULR No. : TC695224000016299E

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010011		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: CPP – 1 Waste Heat Recovery Boiler	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 55.5"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 16.9"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form /28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 27.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
I.	**Stack Emission Parameters**			
a.	Mercury as Hg, (mg/Nm3)	USEPA Method – 0029	BDL(DL: 0.01)	0.03 Max
b.	Oxygen as O2 (%)	IS 13270	11.7	Not Available
c.	Carbon Dioxide as CO2 (%)	IS 13270	7.3	Not Available
d.	Carbon Monoxide as CO (%)	IS 13270	BDL(DL: 0.2)	1 Max
e.	Particulate Matter as PM (mg/Nm3)	IS 11255 (Part-1)	18.15	30 Max
f.	Sulphur Dioxide as SO2 (mg/Nm3)	IS 11255 (Part-2)	24.74	100 Max
g.	Flow Rate (Nm3/hr)	IS 11255 (Part-3)	16566	Not Available
h.	Velocity (m/s)	IS 11255 (Part-3)	9.0	Not Available
i.	Stack Temperature (°C)	IS 11255 (Part-3)	182	Not Available
j.	Oxides of Nitrogen as NOx, (mg/Nm3)	IS 11255 (Part-7)	73.14	100 Max

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environmental Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040012

NABL ULR No. : TC695224000016298F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010012		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: CPP – 2 Waste Heat Recovery Boiler	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 46.4"	Completed On	: 04-10-2024
Longitude	: E 079° 50' 10.5"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28-09-2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 27.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**Stack Emission Parameters**			
a.	Mercury as Hg, (mg/Nm3)	USEPA Method – 0029	BDL(DL 0.01)	0.03 Max
b.	Oxygen as O2 (%)	IS 13270	12.6	Not Available
c.	Carbon Dioxide as CO2 (%)	IS 13270	6.5	Not Available
d.	Carbon Monoxide as CO (%)	IS 13270	BDL(DL 0.2)	1 Max
e.	Particulate Matter as PM (mg/Nm3)	IS 11255 (Part-1)	13.71	30 Max
f.	Sulphur Dioxide as SO2 (mg/Nm3)	IS 11255 (Part-2)	16.49	100 Max
g.	Flow Rate (Nm3/hr)	IS 11255 (Part-3)	8611	Not Available
h.	Velocity (m/s)	IS 11255 (Part-3)	8.2	Not Available
i.	Stack Temperature (°C)	IS 11255 (Part-3)	129	Not Available
j.	Oxides of Nitrogen as NOx, (mg/Nm3)	IS 11255 (Part-7)	61.51	100 Max

represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Disclaimer :

- The test result related only to the items tested
- The test report shall not be reproduced in full or part without the written approval of ITC Labs. Chennai
- The test items shall not be retained more than 15 days from the date of issue of test report except in the case as required by the regulatory bodies and Customers

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040013 (1)

NABL ULR No. : TC695224000016297F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010013		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: DG Set 600 KVA (Old)	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 51.2"	Completed On	: 04-10-2024
Longitude	: E 79° 50' 17.7"	Date of Report	: 04-10-2024
Sample Submission	: Sampled by Lab Rep.		
Type Sampling	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28-09-2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 28.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**Stack Emission Parameters**			
a.	Oxygen as O2 (%)	IS 13270	16.1	Not Available
b.	Carbon Dioxide as CO2 (%)	IS 13270	3.3	Not Available
c.	Carbon Monoxide as CO (g/kw-hr)	ITC/CHN/INS/SOP/070	0.32	≤3.5 Max
d.	Particulate Matter as PM (g/kw-hr)	IS 11255 (Part-1)	0.07	≤0.2 Max
e.	Sulphur Dioxide as SO2 (mg/Nm^3)	IS 11255 (Part-2)	BDL(DL 4.0)	Not Available
f.	Flow Rate (Nm3/hr)	IS 11255 (Part-3)	871	Not Available
g.	Stack Temperature (^0C)	IS 11255 (Part-3)	119	Not Available
h.	Velocity (m/s)	IS 11255 (Part-3)	10.2	Not Available
i.	Concentration of Oxides of Nitrogen as (NOx as NO2) + Hydrocarbon (HC), (g/kw-hr)	IS 11255 (Part-7)	0.51	≤4.0 Max
		USEPA Method – 0025	BDL(DL 0.5)	

#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

Test Report No. : ICE-2410040013 (2)

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010013		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: DG Set 600 KVA (Old)	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 51.2"	Completed On	: 04-10-2024
Longitude	: E 79° 50' 17.7"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/28-09-2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 28.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**Stack Emission Parameters**			
a.	Smoke Light (Light Absorption Co-Efficient), m-1	Instrument Method	0.2	≤ 0.7

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

TC - 6952

Test Report No. : ICE-2410040014 (1)

NABL ULR No. : TC695224000016296F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010014		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: DG Set 250 KVA	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.6"	Completed On	: 04-10-2024
Longitude	: E 79° 50' 10.9"	Date of Report	: 04-10-2024
Sample Submission	: Sampled by Lab Rep.		
Type Sampling	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 28.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**Stack Emission Parameters**			
a.	Oxygen as O2 (%)	IS 13270	16.8	Not Available
b.	Carbon Dioxide as CO2 (%)	IS 13270	3.0	Not Available
c.	Carbon Monoxide as CO (g/kw-hr)	ITC/CHN/INS/SOP/070	0.47	≤3.5
d.	Particulate Matter as PM (g/kw-hr)	IS 11255 (Part-1)	0.07	≤0.2
e.	Sulphur Dioxide as SO2 (mg/Nm^3)	IS 11255 (Part-2)	BDL(DL 4.0)	Not Available
f.	Flow Rate (Nm3/hr)	IS 11255 (Part-3)	480	Not Available
g.	Stack Temperature (^0C)	IS 11255 (Part-3)	144	Not Available
h.	Velocity (m/s)	IS 11255 (Part-3)	10.6	Not Available
i.	Concentration of Oxides of Nitrogen as (NOx as NO2) + Hydrocarbon (HC), (g/kw-hr)	IS 11255 (Part-7)	0.63	≤4.0
		USEPA Method – 0025	BDL(DL 0.5)	

represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Division

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

TEST REPORT

Since 1988

Test Report No. : ICE-2410040014 (2)

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010014		
Sample Description#	: Stack Emission	Received On	: 01-10-2024
Sample Location	: DG Set 250 KVA	Commenced On	: 01-10-2024
Latitude	: N 10° 50' 47.6"	Completed On	: 04-10-2024
Longitude	: E 79° 50' 10.9"	Date of Report	: 04-10-2024
Sample Submission Type	: Sampled by Lab Rep.		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference#	: Test Request Form/ 28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring : 28.09.24

S.No.	Parameters	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
1.	**Stack Emission Parameters**			
a.	Smoke Light (Light Absorption Co-Efficient), m-1	Instrument Method	0.3	≤ 0.7

'#' represents Customer Defined Fields

NOTE : BDL: Below Detection Limit; DL: Detection Limit. Instrument Used: Stack Sampler, Flue gas Analyzer.

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested parameters.

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

A4

Online Monitoring Data - APR 24 to SEP 24

Location: 16 numbers of Chlorine sensors located around the plant (Maximum values recorded is given below)						
Parameters	APR	MAY	JUN	JUL	AUG	SEP
Chlorine -ppm	0.01	0.01	0.01	0.01	0.01	0.01

CHEMPLAST SANMAR LTD
MELAVANJORE

A5

Water Analysis Data - APR 24 to SEP 24

Location: Desalination Plant (Reject water)						
Parameters	APR	MAY	JUN	JUL	AUG	SEP
pH value	7.32	7.49	7.4	7.61	7.6	6.67
DO, mg/L	5.5	5.4	6.1	6.3	5.4	5.6
Colour, Hazen Units	Clear liquid	Clear liquid	Clear liquid	Clear liquid	Clear liquid	Clear liquid
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Floating Material	No presence	No presence	No presence	No presence	No presence	No presence
TSS, mg/L	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)	BLQ(LOQ:1.0)
Oil & Greece	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)
Hg, mg/L	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)
Pb, mg/L	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)
Cd, mg/L	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)	BLQ(LOQ:0.01)

** Sample report attached*

CHEMPLAST SANMAR LTD MELAVANJORE

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

Test Report No. : ICE-2410050017

ORIGINAL

Issued To :

M/s.Chemplast sanmar Limited,.
No.315, Melavanjore, Nagore Po, Karaikal Region, U.T of pondicherry
Karaikal, 611002
Puducherry, India

Sample Registration No.	: E02-2410010017	Received On	: 01-10-2024
Sample Name	: Desalination Reject Water	Commenced On	: 01-10-2024
Sample Condition	: Good	Completed On	: 05-10-2024
Sample Details (if any)		Date of Report	: 05-10-2024
Sample Quantity	: 5lit X 1 No		
Packaging Mode	: Canned		
Sample Submission Type	: Sampled by Lab Rep		
Date of Sampling	: 28.09.2024		
Enviroment Condition	: Good		
Sampling Procedure	: ITC/CHN/GSOP/001		
Customer Reference	: Test Request Form/28/09/2024		
Test Report as per	: CPCB/PPCC Norms		

Description: Clear Liquid

S. No.	Parameter	Measuring Unit	Instrument	Method	Result	Specification
	Discipline : Chemical					
	Group : Pollution & Environment					
(I)	General Parameters					
1	Colour	NA	Visual Inspection	Visual Inspection	Clear Liquid	No Noticeable
2	Odour	NA	Organoleptic	IS 3025 (Part-5)	Agreeable	No Noticeable
3	pH @25°C	NA	pH Meter	IS 3025 (Part-11)	6.67	6.5-8.5
4	Mercury as Hg	mg/L	ICPMS	USEPA 200.8	BLQ(LOQ:0.001)	0.1
5	Total Suspended Solids	mg/L	Balance, Oven, Waterbath	IS 3025 (Part-17)	BLQ(LOQ:1.0)	None from the Industrial Origin
6	Oil and Grease @105°C	mg/L	Balance, Oven, Waterbath	APHA 23rd Edn - 5520 B	BLQ(LOQ:0.1)	0.1
7	Dissolved Oxygen	mg/L	Titration	APHA 23rd ED:2017-4500 O,B,C	5.6	5.0
8	Cadmium as Cd	mg/L	ICPMS	APHA 23rd Edn - 3125 B : 2017	BLQ(LOQ:0.01)	0.1
9	Lead as pb	mg/L	ICPMS	APHA 23rd Edn - 3125 B : 2017	BLQ(LOQ:0.01)	0.1
10	Floating Material	NA	Visual	Visual Examination	No Suspended Particles Presence in the Liquid	No Obnoxious

05/10/2024
Chinnaraja
Verified by

05/10/2024
Vijay Anand
Authorised by

Interstellar Testing Centre Private Limited
Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

Interstellar Testing Centre Private Limited

Since 1988

TEST REPORT

Test Report No. : ICE-2410050017

ORIGINAL

NOTE : BLQ: Below Limit of Quantification, LOQ: Limit of Quantification.

REMARKS : The above Water Sample Conforms to CPCB/PPCC Norms Specification Limit with respect to the above tested parameters.

*****End of Report*****

05/10/2024
Chinnaraja
Verified by

05/10/2024
Vijay Anand
Authorised by

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

A6

Noise Survey Data - APR 24 to SEP 24

Location: Around the entire plant area (Maximum values recorded is given below)						
Parameters	APR	MAY	JUN	JUL	AUG	SEP
Day Leq, dBA	65.8	66.5	60.2	57.3	66	61.7
Night Leq, dBA	60.6	53.4	57.6	54.6	56.4	52.9

** Sample report attached*

CHEMPLAST SANMAR LTD MELAVANJORE

Interstellar Testing Centre Private Limited

Since 1988

TC - 6952

TEST REPORT

Test Report No. : ICE-2410040015

NABL ULR No. : TC695224000016195F

ORIGINAL

Issued To

M/s. Chemplast Sanmar Limited
315, Melavanjore, Nagore Post, Karaikal Region,
U.T. of Puducherry, Pincode - 611002.

Sample Registration No.	: E02-2410010015		
Sample Description*	: Noise Level Monitoring	Received On	: 01-10-2024
Sample Location	: Ambient	Commenced On	: 01-10-2024
Sample Submission Type	: Sampled by Lab Rep.	Completed On	: 04-10-2024
Sampling Procedure	: ITC/CHN/GSOP/001	Date of Report	: 04-10-2024
Customer Reference*	: Test Request Form/28/09/2024		
Test Report as per	: CPCB/PPCB Norms		

Sampling Information

Date of Monitoring :27.09.24

S.No.	Location Name	Method	Result	Specification
	Discipline : Chemical			
	Group : Atmospheric Pollution			
a.	ICD Plant-GAIL Station (Day Time), Leq dB (A)	IS 9989	50.4	75 dBA (Max) 06.00am to 10.00pm
b.	ICD Plant-GAIL Station (Night Time), Leq dB (A)	IS 9989	49.3	70 dBA (Max) 10.00pm to 06.00am
c.	ICD Plant-Near Temple (Day Time), Leq dB (A)	IS 9989	52.7	75 dBA (Max) 06.00am to 10.00pm
d.	ICD Plant-Near Temple (Night Time), Leq dB (A)	IS 9989	47.9	70 dBA (Max) 10.00pm to 06.00am
e.	PVC Plant-Active SLF (Day Time), Leq dB (A)	IS 9989	48.0	75 dBA (Max) 06.00am to 10.00pm
f.	PVC Plant-Active SLF (Night Time), Leq dB (A)	IS 9989	45.0	70 dBA (Max) 10.00pm to 06.00am
g.	PVC Plant-Old SLF (Day Time), Leq dB (A)	IS 9989	61.7	75 dBA (Max) 06.00am to 10.00pm
h.	PVC Plant-Old SLF (Night Time), Leq dB (A)	IS 9989	51.7	70 dBA (Max) 10.00pm to 06.00am
i.	PVC Plant-Scrap Yard (Day Time), Leq dB (A)	IS 9989	58.5	75 dBA (Max) 06.00am to 10.00pm
j.	PVC Plant-Scrap Yard (Night Time), Leq dB (A)	IS 9989	52.9	70 dBA (Max) 10.00pm to 06.00am

'#' represents Customer Defined Fields

NOTE : Instrument Used: Sound Level meter

REMARKS : The above sample complies with CPCB/PPCB norms with respect to the above tested Parameters

*****End Of Report*****

Verified by

Authorised by

R. SAKTHIVEL
Assistant Manager
Environment Section

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,
Perungudi, Sholinganallur Taluk, Chennai - 600 096.
Ph : 044 - 24962512
Email : itclabs.chennai@itclabs.com
Website : www.itclabs.com

HOSCONS®
Medical Laboratories

A-

Employee Name	: Mr.PRAKASH K	SID No	: 134846
Employee Hos_ ID	: HOSCONS33579	Received On	: 03-11-2023/03:34 PM
Age/Sex	: 29.0Yrs / Male	Printed On	: 08-11-2023/03:53 PM
Employee_ ID	: KP529	Mobile No	: 8344566751
Department	: PRODUCTION	Report Status	: Final

KP529

ANTHROPOMETRIC DATA									
Height	154-Cm	*Weight*	58-Kg	*BMI*	24.5	*BP*	110/70mm Hg	*Pulse*	68/min

REPORTS ENCLOSED				
Blood Report	Normal	*X-Ray*	Normal	

GENERAL ADVICES

* Eat green, leafy vegetable such as spinach, and collards
* Drink Three litres of water daily

FITNESS STATUS

Mr. PRAKASH K is medically examined and found to be normal.

Dr. S. VIGNESHWARAN, MBBS, AFIH
General Physician
HOSCONS Healthcare India Pvt Ltd
Reg. No. 147120

HOSCONS®
Medical Laboratories

Employee Name	: Mr.PRAKASH K	SID No	: 134846
Employee Hos_ ID	: HOSCONS33579	Received On	: 03-11-2023/03:34 PM
Age/Sex	: 29.0Yrs / Male	Printed On	: 08-11-2023/04:37 PM
Employee_ ID	: KP529	Mobile No	: 8344566751
Department	: PRODUCTION	Report Status	: Final

TEST NAME	RESULT	UNIT	NORMAL RANGE
			134846
HAEMATOLOGY			
HAEMOGLOBIN	14.3	gm/dl	Male : 13.5 - 18.0 gm/dl Female : 11.5 - 16.4 gm/dl
PCV	39.03	%	40 - 65 %
TOTAL WBC COUNT	8520	Cells/cmm	4,500 - 11,000 Cells/cmm
RBC COUNT	4.38	Mill/Cmm	4.35 - 5.65 Mill/Cmm
MCV	89	fL	76 - 96 fL
MCH	32.6	pg	27 - 32 pg
MCHC	36.6	gm%	30 - 35 gm%
PLATELET COUNT	3.07	Lakhs / cmm	1.5 - 4.5 Lakhs cells/mm
NEUTROPHILS	55	%	40.0 - 80.0
LYMPHOCYTES	41	%	20.0 - 40.0
EOSINOPHILS	2	%	1.0 - 6.0
MONOCYTES	2	%	2.0 - 10.0
BIOCHEMISTRY			
BLOOD SUGAR (RANDOM)	100	mm/dl	80 – 140 mm/dl
BLOOD UREA	24	mgs/dl	10 – 40 mgs/dl
BUN	11.2	mgs/dl	5 – 21 mgs/dl
S. CREATININE	0.8	mg/dl	0.6 – 1.2 mg/dl
LIVER FUNCTION TEST			
BILIRUBIN - TOTAL	0.9	mg/dL	0.1 - 1.2 mg/dL
BILIRUBIN – DIRECT	0.5	mg/dL	0 - 0.3 mg/dL
BILIRUBIN – INDIRECT	0.4	mg/dl	0.2 - 0.8 mg/dl
S.G.O.T	24	U/L	5.0 - 40.0
S.G.P.T	20	U/L	7 to 56
ALKALINE PHOSPHATASE	85	U/L	44 to 147
T.PROTEIN	7.0	gms/dl	6.0 - 8.7
S.ALBUMIN	3.9	gms/dl	3.2 to 5.0
GLOBULIN	3.1		2 - 3.5
A G RATIO	1.3		

**** End of Report ****

Lab Technician

Mr. Prabaharan. B.Sc (Microbiology)
Chief of Laboratory Services

HOSCONS®
Medical Laboratories

Employee Name	: Mr.PRAKASH K	SID No	: 134846
Employee Hos_ ID	: HOSCONS33579	Received On	: 03-11-2023/03:34 PM
Age/Sex	: 29.0Yrs / Male	Printed On	: 08-11-2023/03:53 PM
Employee_ ID	: KP529	Mobile No	: 8344566751
Department	: PRODUCTION	Report Status	: Final

X- RAY CHEST PA VIEW

The lungs fields are clear

The cardio thoracic ratio is within normal limits.

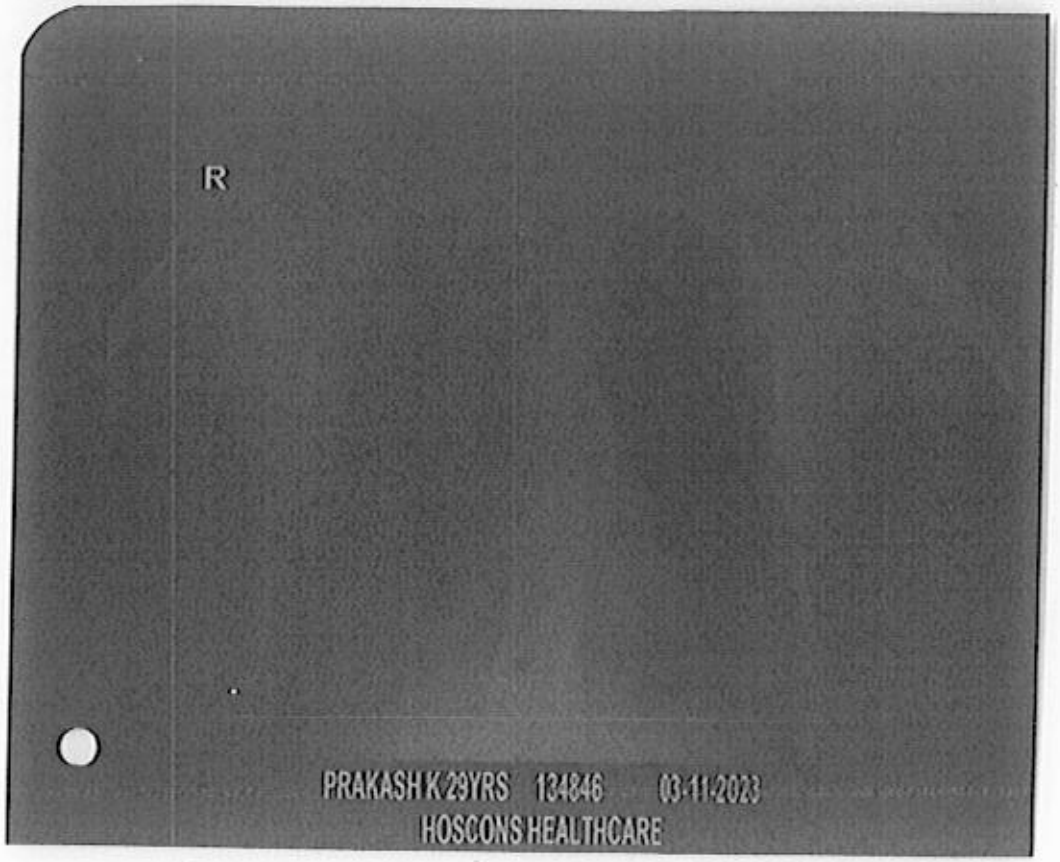
The apices, Costo and Cardiophrenic angles are free.

The cardio vascular shadow and Hilar shadow no abnormal feature. The bony thorax shows no significant abnormality.

Both domes of diaphragm appear normal.

IMPRESSION: NORMAL STUDY

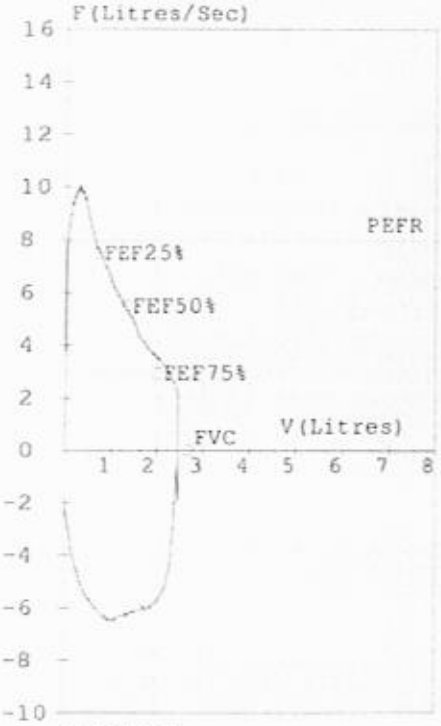
Dr. C. G. Durairajan,
M.D DMR
Consultant Radiologist
Reg. No: 15066

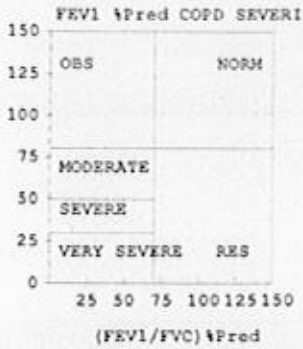

R
PRAKASH K 29YRS 134846 03-11-2023
HOSCONS HEALTHCARE

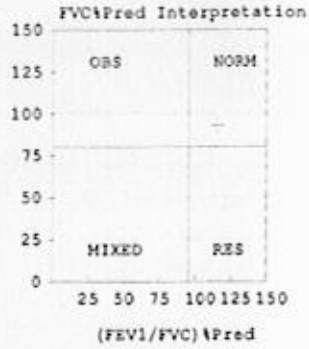
RECORDERS & MEDICARE SYSTEMS

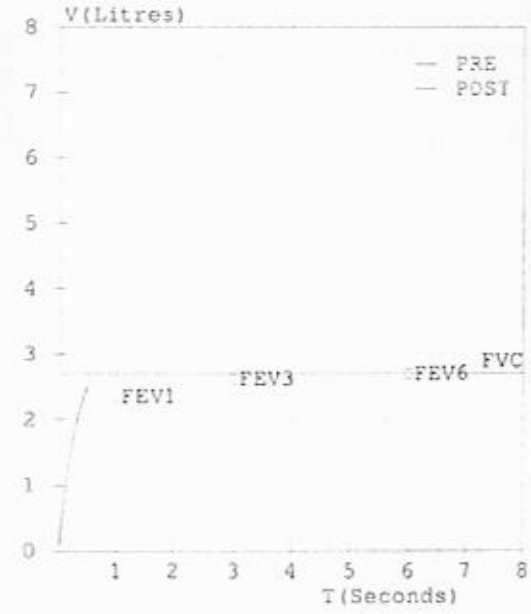
Plot # 196,Industrial Area,Phase-1, Panchkula, Haryana INDIA - 134113

Patient: KPrakash		Age	: 29 Yrs	Gender	: Male
Refd.By:		Height	: 152 Cms	Smoker	: No
Pred.Eqns: RECORDERS		Weight	: 48 Kgs	Eth. Corr	: 100
Date	: 11-06-2024 07:25 PM	ID	: 36	Temp	:









FVC Results

Parameter		Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC	(L)	02.70	02.50	093	-----	---	---
FEV1	(L)	02.34	02.50	107	-----	---	---
FEV1/FVC	(%)	86.67	100.00	115	-----	---	---
FEF25-75	(L/s)	04.09	05.38	132	-----	---	---
PEFR	(L/s)	07.96	10.10	127	-----	---	---
FIVC	(L)	-----	02.54	---	-----	---	---
FEV.5	(L)	-----	02.48	---	-----	---	---
FEV3	(L)	02.62	02.50	095	-----	---	---
PIFR	(L/s)	-----	06.46	---	-----	---	---
FEF75-85	(L/s)	-----	03.36	---	-----	---	---
FEF.2-1.2	(L/s)	06.72	07.49	111	-----	---	---
FEF 25%	(L/s)	07.47	07.88	105	-----	---	---
FEF 50%	(L/s)	05.48	05.50	100	-----	---	---
FEF 75%	(L/s)	02.92	03.74	128	-----	---	---
FEV.5/FVC	(%)	-----	99.20	---	-----	---	---
FEV3/FVC	(%)	97.04	100.00	103	-----	---	---
FET	(Sec)	-----	00.51	---	-----	---	---
ExplTime	(Sec)	-----	00.01	---	-----	---	---
Lung Age	(Yrs)	029	027	093	-----	---	---
FEV6	(L)	02.70	-----	---	-----	---	---
FIF25%	(L/s)	-----	06.02	---	-----	---	---
FIF50%	(L/s)	-----	06.32	---	-----	---	---
FIF75%	(L/s)	-----	05.59	---	-----	---	---

Pre Test COPD Severity

Test within normal limits

Pre Medication Report Indicates

Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80

Dr.B.Senthilkumar
Reg.No: M4225
Factory Medical Officer
Champlast Sanmar Ltd.
Kan...

The doctors of this report require clinical correlation before any clinical action. http://www.rmsindia.com

HOSCONS®
Medical Laboratories

Employee Name	: Mr.JAYACHANDRAN C	SID No	: 134873
Employee Hos_ ID	: HOSCONS33606	Received On	: 04-11-2023/07:11 AM
Age/Sex	: 35.0Yrs / Male	Printed On	: 08-11-2023/04:08 PM
Employee_ ID	: CJ2	Mobile No	: 9865131541
Department	: PRODUCTION	Report Status	: Final

CJ2

ANTHROPOMETRIC DATA									
Height	172-Cm	*Weight*	83.1-Kg	*BMI*	28.1	*BP*	120/80mm Hg	*Pulse*	88/min

REPORTS ENCLOSED				
Blood Report	Normal	*X-Ray*	Normal	

GENERAL ADVICES

* Eat green, leafy vegetable such as spinach, and collards
* Drink Three litres of water daily

FITNESS STATUS

Mr. JAYACHANDRAN C is medically examined and found to be normal.

Dr. S. VIGNESHWARAN, MBBS, AFIH
General Physician
HOSCONS Healthcare India Pvt Ltd
Reg. No. 147120

HOSCONS®
Medical Laboratories

Employee Name	: Mr.JAYACHANDRAN C	SID No	: 134873
Employee Hos_ ID	: HOSCONS33606	Received On	: 04-11-2023/07:11 AM
Age/Sex	: 35.0Yrs / Male	Printed On	: 08-11-2023/04:43 PM
Employee_ ID	: CJ2	Mobile No	: 9865131541
Department	: PRODUCTION	Report Status	: Final

TEST NAME	RESULT	UNIT	NORMAL RANGE
			134873
HAEMATOLOGY			
HAEMOGLOBIN	**16.7**	gm/dl	Male : 13.5 - 18.0 gm/dl Female : 11.5 - 16.4 gm/dl
PCV	**46.82**	%	40 - 65 %
TOTAL WBC COUNT	**7270**	Cells/cmm	4,500 - 11,000 Cells/cmm
RBC COUNT	**4.88**	Mill/Cmm	4.35 - 5.65 Mill/Cmm
MCV	**96**	fL	76 - 96 fL
MCH	**34.2**	pg	27 - 32 pg
MCHC	**35.6**	gm%	30 - 35 gm%
PLATELET COUNT	**2.78**	Lakhs / cmm	1.5 - 4.5 Lakhs cells/mm
NEUTROPHILS	**70**	%	40.0 - 80.0
LYMPHOCYTES	**25**	%	20.0 - 40.0
EOSINOPHILS	**2**	%	1.0 - 6.0
MONOCYTES	**3**	%	2.0 - 10.0
BIOCHEMISTRY			
BLOOD SUGAR (RANDOM)	**109**	mm/dl	80 – 140 mm/dl
BLOOD UREA	**15**	mgs/dl	10 – 40 mgs/dl
BUN	**7**	mgs/dl	5 – 21 mgs/dl
S. CREATININE	**0.6**	mg/dl	0.6 – 1.2 mg/dl
LIVER FUNCTION TEST			
BILIRUBIN - TOTAL	**0.6**	mg/dL	0.1 - 1.2 mg/dL
BILIRUBIN – DIRECT	**0.4**	mg/dL	0 - 0.3 mg/dL
BILIRUBIN – INDIRECT	**0.2**	mg/dl	0.2 - 0.8 mg/dl
S.G.O.T	**15**	U/L	5.0 - 40.0
S.G.P.T	**19**	U/L	7 to 56
ALKALINE PHOSPHATASE	**63**	U/L	44 to 147
T.PROTEIN	**7.3**	gms/dl	6.0 - 8.7
S.ALBUMIN	**4.1**	gms/dl	3.2 to 5.0
GLOBULIN	**3.2**		2 - 3.5
A G RATIO	**1.3**		

**** End of Report ****

Lab Technician

Mr. Prabaharan. B.Sc (Microbiology)
Chief of Laboratory Services

HOSCONS®
Medical Laboratories

Employee Name	: Mr.JAYACHANDRAN C	SID No	: 134873
Employee Hos_ ID	: HOSCON533606	Received On	: 04-11-2023/07:11 AM
Age/Sex	: 35.0Yrs / Male	Printed On	: 08-11-2023/04:08 PM
Employee_ ID	: CJ2	Mobile No	: 9865131541
Department	: PRODUCTION	Report Status	: Final

X- RAY CHEST PA VIEW

The lungs fields are clear

The cardio thoracic ratio is within normal limits.

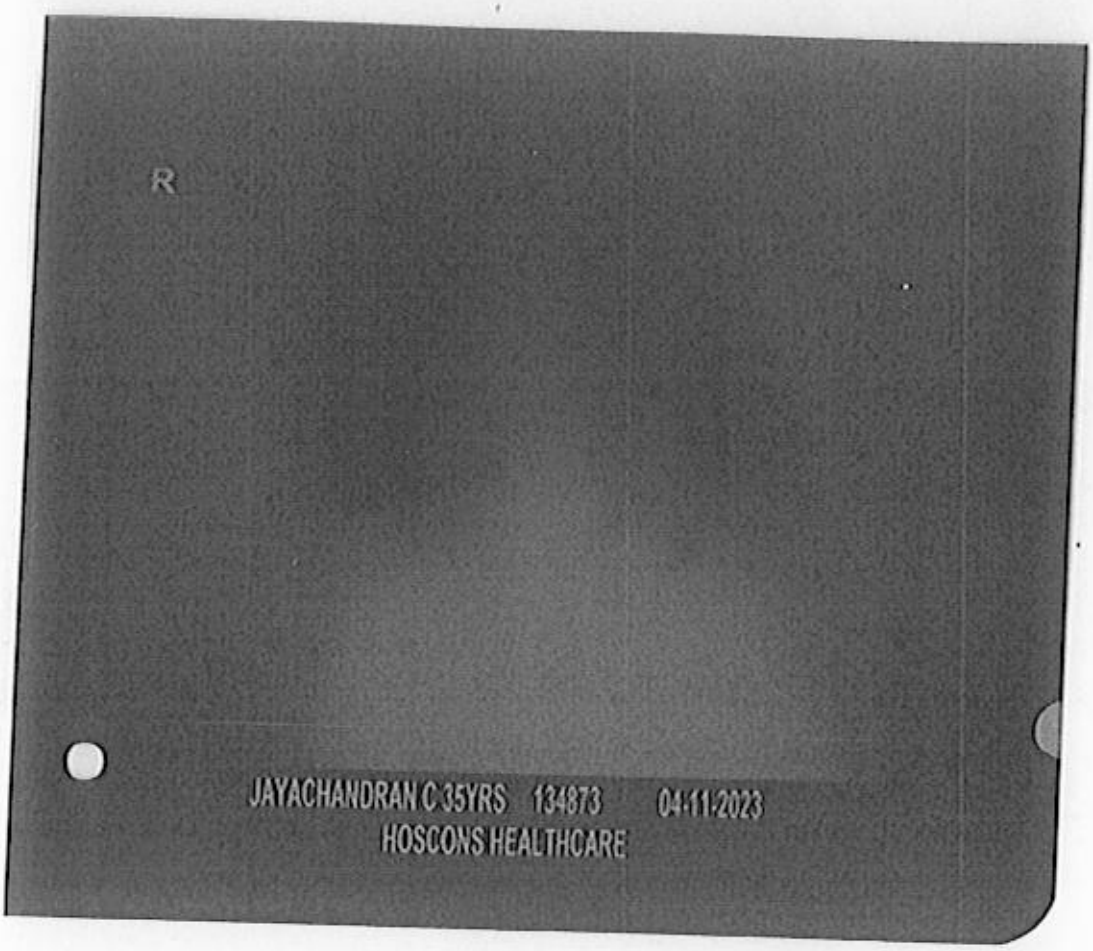
The apices, Costo and Cardiophrenic angles are free.

The cardio vascular shadow and Hilar shadow no abnormal feature. The bony thorax shows no significant abnormality.

Both domes of diaphragm appear normal.

IMPRESSION: NORMAL STUDY

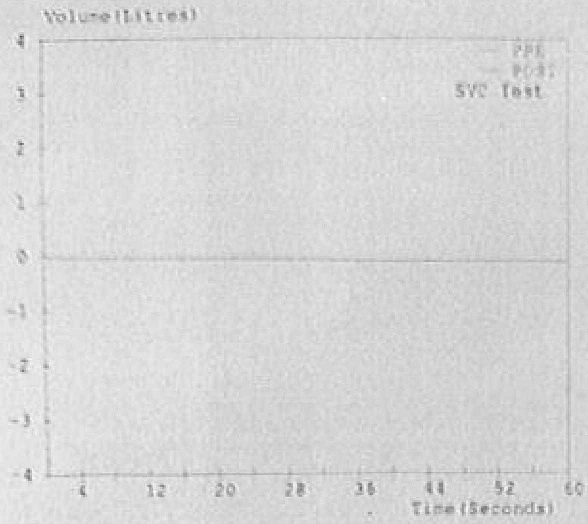
Dr. C. G. Durairajan,
M.D DMR
Consultant Radiologist
Reg. No: 15066

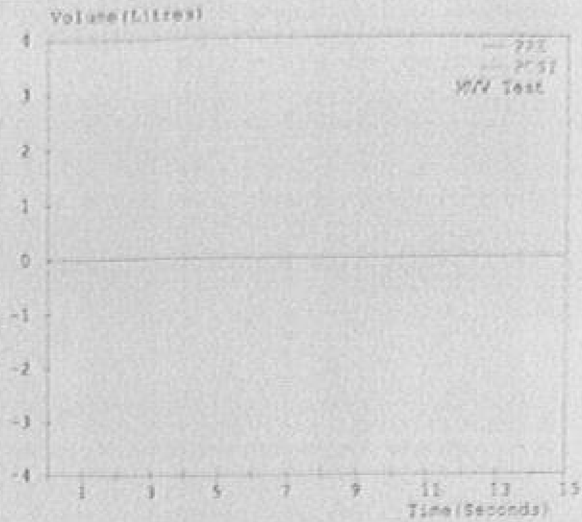

R
JAYACHANDRAN C 35YRS 134873 04-11-2023
HOSCONS HEALTHCARE

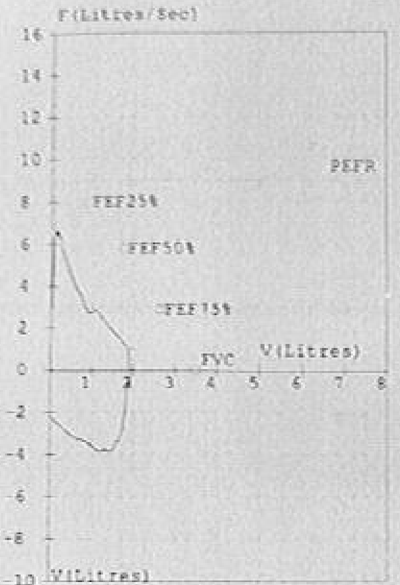
RECORDERS & MEDICARE SYSTEMS

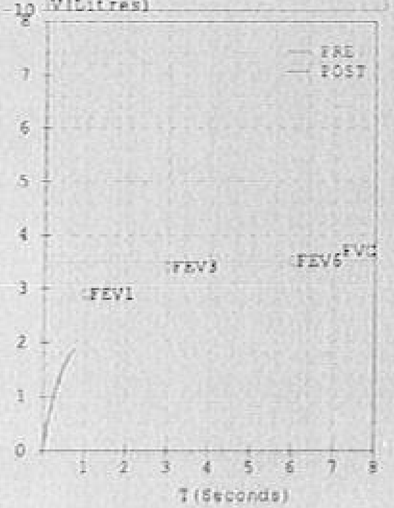
Plot # 196,Industrial Area,Phase-1, Panchkula, Haryana INDIA - 134113

Patient: Jayachandiran EDC	Age : 36 Yrs 02 Mths	Gender : Male
Refd.By:	Height : 170 Cms	Smoker : No
Pred.Eqns: RECORDERS	Weight : 82 Kgs	Eth. Corr: 100
Date : 25-Jun-2024 10:51 AM	ID : 88	Temp :









Spirometry Results

Parameter		Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC	(L)	03.51	01.92	055	-----	---	---
FEV1	(L)	02.91	01.92	066	-----	---	---
FEV1/FVC	(%)	82.91	100.00	121	-----	---	---
FEF25-75	(L/s)	04.12	02.85	069	-----	---	---
PEFR	(L/s)	08.99	06.53	073	-----	---	---
FIVC	(L)	-----	02.37	---	-----	---	---
FEV.5	(L)	-----	01.59	---	-----	---	---
FEV3	(L)	03.40	01.92	056	-----	---	---
PIFR	(L/s)	-----	03.85	---	-----	---	---
FEF75-85	(L/s)	-----	01.07				
FEF.2-1.2	(L/s)	07.16	03.50	049	-----	---	---
FEF 25%	(L/s)	07.96	04.43	056	-----	---	---
FEF 50%	(L/s)	05.74	02.69	047	-----	---	---
FEF 75%	(L/s)	02.88	02.00	069	-----	---	---
FEV.5/FVC	(%)	-----	82.81	---	-----	---	---
FEV3/FVC	(%)	96.87	100.00	103	-----	---	---
FET	(Sec)	-----	00.27	---	-----	---	---
ExplTime	(Sec)	-----	00.02	---	-----	---	---
Lung Age	(Yrs)	036	048	133	-----	---	---
FEV6	(L)	03.51	-----	---	-----	---	---
FIF 25%	(L/s)	-----	03.43	----------		---	---
FIF 50%	(L/s)	-----	02.71	----------		---	---
FIF 75%	(L/s)	-----	01.34	----------		---	---
SVC	(L)	-----	-----	---	-----	---	---
ERV	(L)	01.42	-----	---	-----	---	---
IRV	(L)	-----	-----	---	-----	---	---
VE	(L/min)	-----	-----	---	-----	---	---
Rf	(1/min)	-----	-----	---	-----	---	---
Ti	(sec)	-----	-----	---	-----	---	---
Te	(sec)	-----	-----	---	-----	---	---
VT	(L)	-----	-----	---	-----	---	---
VT/Ti		-----	-----	---	-----	---	---
Ti/Ttot		-----	-----	---	-----	---	---
IC	(L)	-----	-----	---	-----	---	---
MVV	(L/min)	136	-----	---	-----	---	---
MRf	(1/min)	-----	-----	---	-----	---	---
MVT	(L)	-----	-----	---	-----	---	---

Doctor's Notes
Spirometry within normal limits.

Dr.B.SENTHILKUMAR, MBBS AFIH
Regd. No.
Dr.senthilkumar
Factory Medical Officer
Chemplast Sanmar Ltd.
Karaikal

HOSCONS®
Medical Laboratories

Employee Name	: Mr.JOHN ANAND ANTONY L	**SID No**	: 134854
Employee Hos_ ID	: HOSCONS33587	**Received On**	: 03-11-2023/04:50 PM
Age/Sex	: 45.0Yrs / Male	**Printed On**	: 08-11-2023/03:56 PM
Employee_ ID	: LJ501	**Mobile No**	: 9894923005
Department	: PRODUCTION	**Report Status**	: Final

LJ501

ANTHROPOMETRIC DATA									
Height	177-Cm	*Weight*	88-Kg	*BMI*	28.1	*BP*	120/80mm Hg	*Pulse*	78/min

REPORTS ENCLOSED				
Blood Report	Normal	*X-Ray*	Normal	

GENERAL ADVICES

* Eat green, leafy vegetable such as spinach, and collards
* Drink Three litres of water daily

FITNESS STATUS

Mr. JOHN ANAND ANTONY L is medically examined and found to be normal.

.

Dr. S. VIGNESHWARAN, MBBS, AFIH
General Physician
HOSCONS Healthcare India Pvt Ltd
Reg. No. 147120

Employee Name	: Mr.JOHN ANAND ANTONY L	SID No	: 134854
Employee Hos_ ID	: HOSCONS33587	Received On	: 03-11-2023/04:50 PM
Age/Sex	: 45.0Yrs / Male	Printed On	: 08-11-2023/04:38 PM
Employee_ ID	: LJ501	Mobile No	: 9894923005
Department	: PRODUCTION	Report Status	: Final

TEST NAME	RESULT	UNIT	NORMAL RANGE
			134854
HAEMATOLOGY			
HAEMOGLOBIN	16.5	gm/dl	Male : 13.5 - 18.0 gm/dl Female : 11.5 - 16.4 gm/dl
PCV	46.78	%	40 - 65 %
TOTAL WBC COUNT	7660	Cells/cmm	4,500 - 11,000 Cells/cmm
RBC COUNT	5.06	Mill/Cmm	4.35 - 5.65 Mill/Cmm
MCV	92	fL	76 - 96 fL
MCH	32.7	pg	27 - 32 pg
MCHC	35.3	gm%	30 - 35 gm%
PLATELET COUNT	2.51	Lakhs / cmm	1.5 - 4.5 Lakhs cells/mm
NEUTROPHILS	65	%	40.0 - 80.0
LYMPHOCYTES	27	%	20.0 - 40.0
EOSINOPHILS	3	%	1.0 - 6.0
MONOCYTES	5	%	2.0 - 10.0
BIOCHEMISTRY			
BLOOD SUGAR (RANDOM)	123	mm/dl	80 – 140 mm/dl
BLOOD UREA	19	mgs/dl	10 – 40 mgs/dl
BUN	8.9	mgs/dl	5 – 21 mgs/dl
S. CREATININE	0.8	mg/dl	0.6 – 1.2 mg/dl
LIVER FUNCTION TEST			
BILIRUBIN - TOTAL	0.7	mg/dL	0.1 - 1.2 mg/dL
BILIRUBIN – DIRECT	0.3	mg/dL	0 - 0.3 mg/dL
BILIRUBIN – INDIRECT	0.4	mg/dl	0.2 - 0.8 mg/dl
S.G.O.T	24	U/L	5.0 - 40.0
S.G.P.T	28	U/L	7 to 56
ALKALINE PHOSPHATASE	78	U/L	44 to 147
T .PROTEIN	7.3	gms/dl	6.0 - 8.7
S.ALBUMIN	4.1	gms/dl	3.2 to 5.0
GLOBULIN	3.2		2 - 3.5
A G RATIO	1.3		

**** End of Report ****

Lab Technician

Mr. Prabaharan. B.Sc (Microbiology)
Chief of Laboratory Services

HOSCONS®
Medical Laboratories

Employee Name	: Mr.JOHN ANAND ANTONY L	SID No	: 134854
Employee Hos_ ID	: HOSCONS33587	Received On	: 03-11-2023/04:50 PM
Age/Sex	: 45.0Yrs / Male	Printed On	: 08-11-2023/03:56 PM
Employee_ ID	: LJ501	Mobile No	: 9894923005
Department	: PRODUCTION	Report Status	: Final

X- RAY CHEST PA VIEW

The lungs fields are clear

The cardio thoracic ratio is within normal limits.

The apices, Costo and Cardiophrenic angles are free.

The cardio vascular shadow and Hilar shadow no abnormal feature. The bony thorax shows no significant abnormality.

Both domes of diaphragm appear normal.

IMPRESSION: NORMAL STUDY

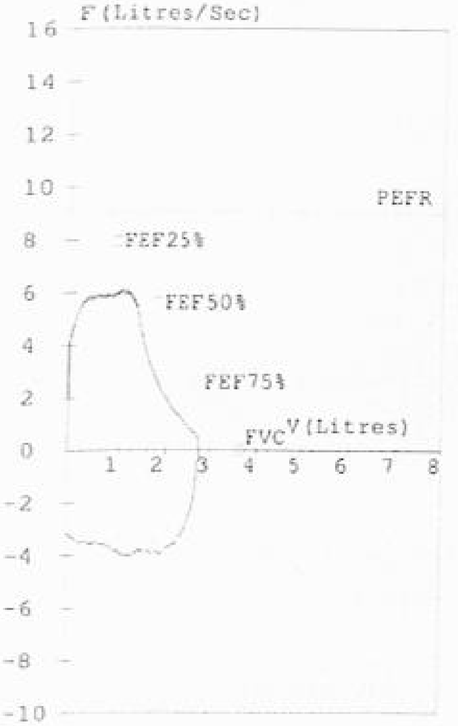
Dr. C. G. Durairajan,
M.D DMR
Consultant Radiologist
Reg. No: 15066

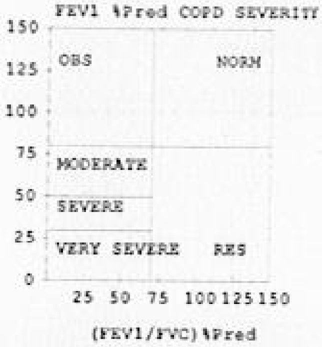
R
JOHN ANAND ANT 45YRS 174854 03-11-2023
HOSSONS HEALTHCARE

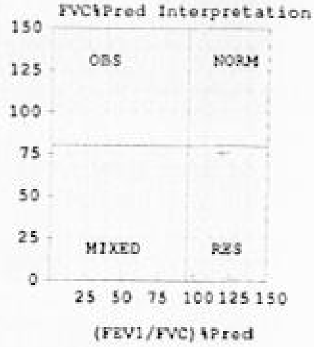
RECORDERS & MEDICARE SYSTEMS

Plot # 196,Industrial Area,Phase-1, Panchkula, Haryana INDIA - 134113

Patient: John 1j501	Age : 45 Yrs	Gender : Male
Refd.By:	Height : 175 Cms	Smoker : No
Pred.Eqns: RECORDERS	Weight : 82 Kgs	Eth. Corr: 100
Date : 10-Jun-2024 04:06 PM	ID : 14	Temp :

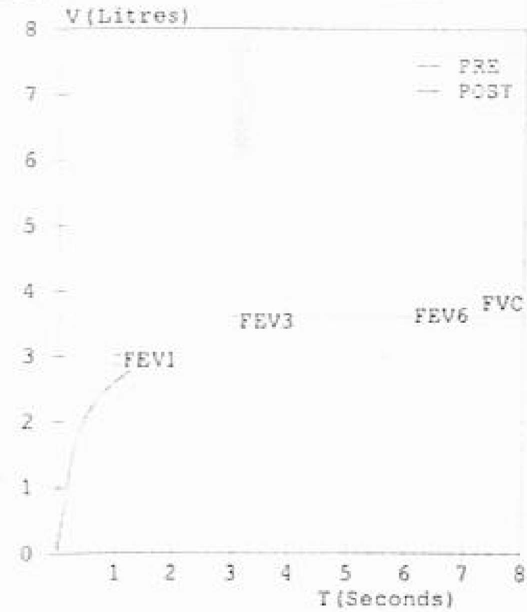






FVC Results

Parameter		Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC	(L)	03.63	02.76	076	------	---	---
FEV1	(L)	02.92	02.64	090	------	---	---
FEV1/FVC	(%)	80.44	95.65	119	------	---	---
FEF25-75	(L/s)	03.81	03.77	099	------	---	---
PEFR	(L/s)	09.03	06.06	067	------	---	---
FIVC	(L)	------	03.50	---	------	---	---
FEV.5	(L)	------	02.09	---	------	---	---
FEV3	(L)	03.52	02.76	078	------	---	---
PIFR	(L/s)	------	04.01	---	------	---	---
FEF75-85	(L/s)	------	01.41	---	------	---	---
FEF.2-1.2	(L/s)	06.80	05.74	084	------	---	---
FEF 25%	(L/s)	07.96	05.77	072	------	---	---
FEF 50%	(L/s)	05.60	05.15	092	------	---	---
FEF 75%	(L/s)	02.58	01.72	067	------	---	---
FEV.5/FVC	(%)	------	75.72	---	------	---	---
FEV3/FVC	(%)	96.97	100.00	103	------	---	---
FET	(Sec)	------	01.23	---	------	---	---
ExplTime	(Sec)	------	00.03	---	------	---	---
Lung Age	(Yrs)	045	049	109	------	---	---
FEV6	(L)	03.63	------	---	------	---	---
FIF25%	(L/s)	------	03.96	---	------	---	---
FIF50%	(L/s)	------	03.47	---	------	---	---
FIF75%	(L/s)	------	00.75	---	------	---	---



Pre Test COPD Severity

Test within normal limits

Doctor's Notes
Spirometry within normal limits.

Dr. senthilkumar

Dr.S.SENTHIL KUMAR MBBS Afih
Reg No. 114215
Factory Medical Officer
Chemplast Sanmar Ltd
Karaikal

HOSCONS®
Medical Laboratories

Employee Name	: Mr.ROBINS V	**SID No**	: 134864
Employee Hos_ ID	: HOSCONS33597	**Received On**	: 03-11-2023/09:33 PM
Age/Sex	: 31.0Yrs / Male	**Printed On**	: 08-11-2023/04:05 PM
Employee_ ID	: NAPS	**Mobile No**	: 8072777185
Department	: TONNER	**Report Status**	: Final

NAPS

ANTHROPOMETRIC DATA									
Height	163-Cm	*Weight*	78-Kg	*BMI*	29.4	*BP*	120/80mm Hg	*Pulse*	74/min

REPORTS ENCLOSED				
Blood Report	Normal	*X-Ray*	Normal	

GENERAL ADVICES

* Eat green, leafy vegetable such as spinach, and collards
* Drink Three litres of water daily

FITNESS STATUS

Mr. ROBINS V is medically examined and found to be normal.

Dr. S. VIGNESHWARAN, MBBS, AFIH
General Physician
HOSCONS Healthcare India Pvt Ltd
Reg. No. 147120

HOSCONS®
Medical Laboratories

Employee Name	: Mr.ROBINS V	SID No	: 134864
Employee Hos_ ID	: HOSCONS33597	Received On	: 03-11-2023/09:33 PM
Age/Sex	: 31.0Yrs / Male	Printed On	: 08-11-2023/04:41 PM
Employee_ ID	: NAPS	Mobile No	: 8072777185
Department	: TONNER	Report Status	: Final

TEST NAME	RESULT	UNIT	NORMAL RANGE
			134864
HAEMATOLOGY			
HAEMOGLOBIN	16.5	gm/dl	Male : 13.5 - 18.0 gm/dl Female : 11.5 - 16.4 gm/dl
PCV	45.62	%	40 - 65 %
TOTAL WBC COUNT	7160	Cells/cmm	4,500 - 11,000 Cells/cmm
RBC COUNT	5.03	Mill/Cmm	4.35 - 5.65 Mill/Cmm
MCV	91	fL	76 - 96 fL
MCH	32.8	pg	27 - 32 pg
MCHC	36.2	gm%	30 - 35 gm%
PLATELET COUNT	2.55	Lakhs / cmm	1.5 - 4.5 Lakhs cells/mm
NEUTROPHILS	49	%	40.0 - 80.0
LYMPHOCYTES	45	%	20.0 - 40.0
EOSINOPHILS	2	%	1.0 - 6.0
MONOCYTES	4	%	2.0 - 10.0
BIOCHEMISTRY			
BLOOD SUGAR (RANDOM)	104	mm/dl	80 – 140 mm/dl
BLOOD UREA	28	mgs/dl	10 – 40 mgs/dl
BUN	13.1	mgs/dl	5 – 21 mgs/dl
S. CREATININE	1.0	mg/dl	0.6 – 1.2 mg/dl
LIVER FUNCTION TEST			
BILIRUBIN - TOTAL	0.7	mg/dL	0.1 - 1.2 mg/dL
BILIRUBIN – DIRECT	0.3	mg/dL	0 - 0.3 mg/dL
BILIRUBIN – INDIRECT	0.4	mg/dl	0.2 - 0.8 mg/dl
S.G.O.T	17	U/L	5.0 - 40.0
S.G.P.T	27	U/L	7 to 56
ALKALINE PHOSPHATASE	71	U/L	44 to 147
T .PROTEIN	7.5	gms/dl	6.0 - 8.7
S.ALBUMIN	4.3	gms/dl	3.2 to 5.0
GLOBULIN	3.2		2 - 3.5
A G RATIO	1.3		

**** End of Report ****

Lab Technician

Mr. Prabaharan. B.Sc (Microbiology)
Chief of Laboratory Services

HOSCONS®
Medical Laboratories

Employee Name	: Mr.ROBINS V	SID No	: 134864
Employee Hos_ ID	: HOSCONS33597	Received On	: 03-11-2023/09:33 PM
Age/Sex	: 31.0Yrs / Male	Printed On	: 08-11-2023/04:05 PM
Employee_ ID	: NAPS	Mobile No	: 8072777185
Department	: TONNER	Report Status	: Final

X- RAY CHEST PA VIEW

The lungs fields are clear

The cardio thoracic ratio is within normal limits.

The apices, Costo and Cardiophrenic angles are free.

The cardio vascular shadow and Hilar shadow no abnormal feature. The bony thorax shows no significant abnormality.

Both domes of diaphragm appear normal.

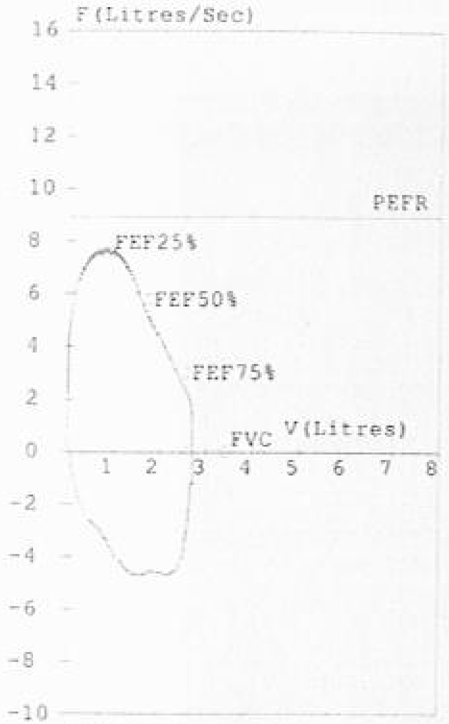
IMPRESSION: NORMAL STUDY

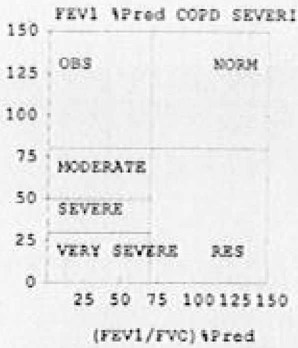
Dr. C. G. Durairajan,
M.D DMR
Consultant Radiologist
Reg. No: 15066

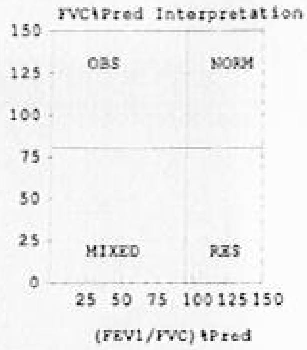
RECORDERS & MEDICARE SYSTEMS

Plot # 196,Industrial Area,Phase-1, Panchkula, Haryana INDIA - 134113

Patient: V Robins	Age : 32 Yrs	Gender : Male
Refd.By:	Height : 167 Cms	Smoker : No
Pred.Eqns: RECORDERS	Weight : 78 Kgs	Eth. Corr: 100
Date : 02-Jul-2024 12:19 PM	ID : 127	Temp :

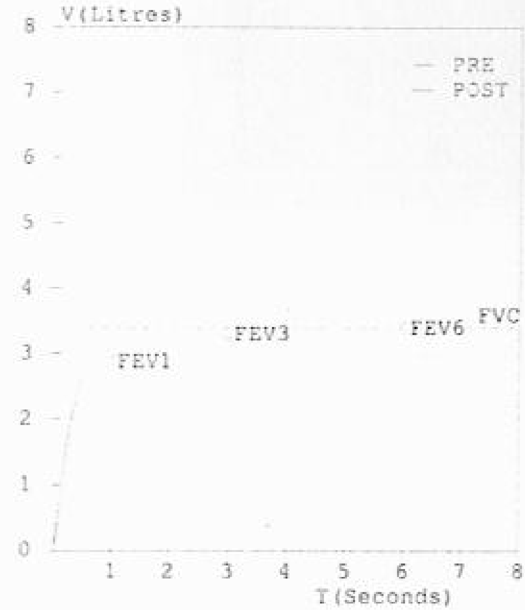






FVC Results

Parameter		Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC	(L)	03.41	02.72	080	------	---	---
FEV1	(L)	02.88	02.72	094	------	---	---
FEV1/FVC	(%)	84.46	100.00	118	------	---	---
FEF25-75	(L/s)	04.24	06.02	142	------	---	---
PEFR	(L/s)	08.92	07.68	086	------	---	---
FIVC	(L)	------	02.65	---	------	---	---
FEV.5	(L)	------	02.59	---	------	---	---
FEV3	(L)	03.31	02.72	082	------	---	---
PIFR	(L/s)	------	04.66	---	------	---	---
FEF75-85	(L/s)	------	03.47	---	------	---	---
FEF.2-1.2	(L/s)	07.28	07.19	099	------	---	---
FEF 25%	(L/s)	07.94	07.66	096	------	---	---
FEF 50%	(L/s)	05.78	06.64	115	------	---	---
FEF 75%	(L/s)	03.01	04.13	137	------	---	---
FEV.5/FVC	(%)	------	95.22	---	------	---	---
FEV3/FVC	(%)	97.07	100.00	103	------	---	---
FET	(Sec)	------	00.58	---	------	---	---
ExplTime	(Sec)	------	00.04	---	------	---	---
Lung Age	(Yrs)	032	034	106	------	---	---
FEV6	(L)	03.41	------	---	------	---	---
FIF25%	(L/s)	------	04.63	---	------	---	---
FIF50%	(L/s)	------	04.62	---	------	---	---
FIF75%	(L/s)	------	03.22	---	------	---	---



Pre Test COPD Severity

Test within normal limits

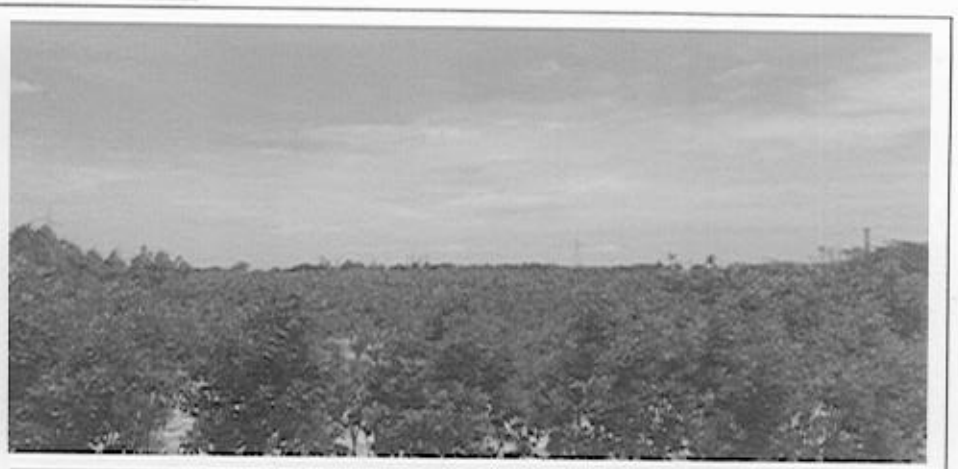
Doctor's Notes
Spirometry within normal limits.

Dr senthilkumar


R
ROBINS.V 31YRS 134864 03-11-2023
HOSCONS HEALTHCARE

A 8

Photographs - Green Belt



CHEMPLAST SANMAR LTD
MELAVANJORE

A9

भारत सरकार/Government of India
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) /Petroleum & Explosives Safety Organisation (PESO)
A और D - विंग, ब्लॉक 1-8, दूसरा तल, शास्त्री भवन, 26 हड्डोउस रोड, नुंगम्बक्कम
चेन्नै- 600006
A & D - Wing, Block 1-8, IInd Floor, Shastri Bhavan,
26 Haddous Road, Nungambakkam,
Chennai - 600006

ई-मेल:/E-mail : jtccechennai@explosives.gov.in
फोन / फ़ैक्स नंबर:/Phone/Fax No : 044 - 28287118,28281023,28281041,28287119/28284848

अनुज्ञप्ति सं./No : S/HO/PY/03/11(S13690)

दिनांक/Dated : 02/08/2024

सेवा में/To,

M/S. CHEMPLAST SANMAR LIMITED,
9, CATHEDRAL ROAD,
Parthasarathypuram, Teynampet,
Chennai,
Chennai,
Taluka: Chennai,
District: CHENNAI,
State: Tamil Nadu
PIN: 600086

विषय :/Sub : **Plot No, In the plant, Nagore Main Road,, MELAVANJORE, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002 स्थित CHLORINE, गैस के संपीडित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाव पात्र (अज्वलित) नियम, 2016 के अधीन स्वीकृत अनुज्ञप्ति संख्या S/HO/PY/03/11 के नवीनीकरण संबंध में /Storage of NCHLORINE gas in pressure vessels at Plot No, In the plant, Nagore Main Road,, MELAVANJORE, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002 - Licence No : S/HO/PY/03/11 grant in form LS-1A of SMPV(U) Rules, 2016-Renewal of Licence Regarding**

महोदय/Sir(s),

कृपया आपके दिनांक : 31/07/2024 के पत्र संख्या: **OIN1724512** का संदर्भ ग्रहण करें I/Please refer to your application No.**OIN1724512** dated 31/07/2024 .

अनुज्ञप्ति संख्या : **S/HO/PY/03/11** का नवीकरण दिनांक 30th सितंबर 2027 तक कर इसके साथ अग्रेषित की जा रही हैं ।
Licence Number: **S/HO/PY/03/11** is renewed and is valid upto **30th September 2027** is forwarded herwith.

दिनांक 30/09/**2027** . से आगे अनुज्ञप्ति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाएं । विलंब शुल्क से बचने हेतु शुल्क के साथ मूल अनुज्ञप्ति तथा अन्य दस्तावेज अधिकतम दिनांक : 30 सितंबर, **2027** तक **The Jt. Chief Controller of Explosives, South Circle, Chennai** में जरूर पहुंच जाने चाहिए ।
The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/**2027**. The renewal application along with fees, Original licence and other documents shall reach in the Office of **The Jt. Chief Controller of Explosives, South Circle, Chennai**, latest by 30th September,**2027** to avoid late fee.

कृपया अनुज्ञप्ति प्राप्ति की पावती दें I/Please acknowledge the receipt of the licence.

भवदीय/Yours faithfully,

((डा.डी.जीवारत्नम्)
(Dr. D. Jeevarathinam))
उप विस्फोटक नियंत्रक
Dy. Controller of Explosives
कृते संयुक्त मुख्य विस्फोटक नियंत्रक
For Jt. Chief Controller of Explosives
चेन्नै/Chennai

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : http://peso.gov.in देखें)
(For more information regarding status,fees and other details please visit our website http://peso.gov.in)

Note:-This is system generated document does not require signature.

FORM LS-1A/प्ररुप - एलएस--1क

(See Rules 50, 51, 54 and 55)/(नियम 50 , 51, 54 और 55 देखें)

Licence to Store Compressed gas in pressure vessel or vessels

दाब पात्र या पात्रों में संपीड़ित गैस भण्डारकरण के लिए अनुज्ञप्ति

अनुज्ञप्ति सं/Licence No. : **S/HO/PY/03/11(S13690)** फीस रुपए/Fee Rs. **50000/-** per year/प्रति वर्ष

Licence is hereby granted to M/S. CHEMPLAST SANMAR LIMITED, 9, CATHEDRAL ROAD, Parthasarathypuram, Teynampet ,Chennai,Chennai, Taluka: Chennai, District: CHENNAI , State: Tamil Nadu PIN: 600086 valid only for the storage of compressed gas in 5 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No.S/HO/PY/03/11(S13690) dated 17/06/2019 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

श्री M/S. CHEMPLAST SANMAR LIMITED, 9, CATHEDRAL ROAD, Parthasarathypuram, Teynampet ,Chennai,Chennai, Taluka: Chennai, District: CHENNAI , State: Tamil Nadu PIN: 600086 को नीचे वर्णित अनुज्ञप्त परिसरों में और रेखांकन संख्या S/HO/PY/03/11(S13690) dated 17/06/2019 में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अन्य शर्तों पर 5 दाव पात्र / पात्रों में संपीड़ित गैस के भण्डारण के लिए अनुज्ञप्ति मंजूर की जाती है।

यह अनुज्ञप्ति 30 सितंबर 2027 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the **30th September2027.**

Vessel No./वेसल नंबर	Name of Gas/ गैस का नाम	State of Gas/ गैस की स्थिति	Water Capacity in cubic meter/ जल क्षमता (घ.मी.)	Max. working Pre.(kg/cm^2)/ अधिकतम वर्किंग प्रेशर	Quantity Granted in kgs(Liquified gas)/किलोग्रॅम में जारी मात्रा (लिक्विफाईड गैसेस)
24-T-01 A	CHLORINE	Liquified	42.50	18	50000
24-T-01-B	CHLORINE	Liquified	42.50	18	50000
24-T-01-C	CHLORINE	Liquified	42.50	18	50000
24-T-01 D	CHLORINE	Liquified	42.00	18	1
22-T-01E	CHLORINE	Liquified	42.00	12	47880
Total Water capacity			**211.50**		

August 27, 2003

For Chief Controller of Explosives
HQ, Nagpur
कृते मुख्य विस्फोटक नियंत्रक
नागपुर

1). Amendment dated - 19/07/2006
2). Amendment dated - 13/10/2010

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुज्ञप्त परिसर का विवरण और अवस्थिती

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/HO/PY/03/11 dated 17/06/2019 are situated at KaraikalMELAVANJORE and consists of 5 Number(s) vessel(s) (out of 5 vessel(s), one vessel each for CHLORINE, CHLORINE, CHLORINE, CHLORINE, CHLORINE, of largest capacity will be kept empty for emergency for storage of :/अनुज्ञप्त परिसर, प्रदर्शित सीमा और अन्य विवरण जो संलग्न अनुमोदित रेखाचित्र क्र.S/HO/PY/03/11 दिनांक 17/06/2019 में दर्शाए गए है KaraikalMELAVANJORE पर स्थित है और इसमे 5 वेसल सम्मिलित है।

a) Flammable/Corrosive/Toxic Gases :/ज्वलनशील / संक्षारक / विषैली गैसों: CHLORINE

b) Non-Toxic Gases :/अविषैली गैसों :

and is situated at PlotNo : In the plant, Village/Town : KaraikalMELAVANJORE, Police Station : Melvanjore, District : KARAIKAL, State : Pondicheri , Pin : 611002.

/प्लाट संख्या PlotNo : In the plant, गांव या नगर : KaraikalMELAVANJORE, पुलीस थाना : Melvanjore, जिला : KARAIKAL, राज्य : Pondicheri , Pin : 611002 में स्थित है।

SPACE FOR ENDORSEMENT OF RENEWALS/नवीकरण के पृष्ठांकन के लिए स्थान

	Date of Renewal/ नवीकरण की तारीख	Date of Expiry/ अनुज्ञप्ति की समाप्ति की तारीख	Signature and stamp of the licensing authority/अनुज्ञापन प्राधिकारी के हस्ताक्षर और कार्यालय की मुद्रा

This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessles (Unfired) Rules,2016, framed thereunder or of the conditions of the licence./अनुज्ञप्ति, भारतीय विस्फोटक अधिनियम, 1884 या उसके अधीन अधीन बनाए गए स्थिर एवं गतिशील दाब पात्र (अज्वलित) नियम, 2016 या इस अनुज्ञप्ति की शर्तों का उल्लंघन न होने की दशा में, फीस में बिना किसी छूट के तीन वर्ष तक नवीकृत की जाएगी।	02/08/2024	30/09/2027	Dr. D. Jeevarathinam DCE For Jt. Chief Controller of Explosives Chennai

This licence is liable to be cancelled if the licenced premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both./यदि निरीक्षण के समय अनुज्ञप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरुप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति मंजूर की गई है, उनमे से किसी का उल्लंघन होता है तो उस दशा में यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, या दोनों से दण्डनीय भी होगा।

Note:-This is system generated document does not require physical signature.

Digitally signed by DR JEEVRATHINAM D
Reason: Licence No. : S/HO/PY/03/11
Location: South Circle Office [S13690]
Date:2024.08.02 01:34:46 +05:30

Conditions of FORM LS-1A

License No. :S/HO/PY/03/11(S13690)

1. The licensed premises shall conform to the description of location and facilities and to the approved plan, as mentioned on the body of the licence.
2. The licensed premises shall have prominently marked thereon the number of the licence held for it.
3. The emergency telephone numbers of local fire service, police and the principal marketing company or supplier of the compressed gas, and emergency instructions shall be conspicuously displayed in the licensed premises.
4. The licensed premises shall not be used for any purpose other than the purpose for which the licence is granted.
5. The compressed gas shall be stored only in the vessels specified in the licence and shown in the approved plan attached hereto.
6. The storage vessel shall at all times maintain requisite safety distance from any other facility, building, boundary, fencing or protected works as specified in appropriate Table specified in rule 22.
7. A suitable hard stand for parking of the vehicle during loading or unloading of any compressed gas shall be provided . The following minimum safety distances shall be provided between the centre of the hard stand and the storage vessel or boundary line of installation; as well as between the loading or unloading points and storage vessel or boundary line of installation as specified under item (ii) of sub-rule 5 of Rule 27.
8. All fitments of the vessel shall be maintained in good operating condition.
9. No alteration of the position of the vessel and no replacement of the vessel shall be effected except with the previous sanction, in writing, of the licensing authority as provided in the rules.
10. Every vessel before being repaired or exhumed shall be made free of compressed gas and thoroughly cleaned in a safe manner. When a vessel is opened for cleaning or repairs, no lamp of any description either ordinary or electric, electric cables or fans and no articles, appliances or equipment capable of igniting flammable vapours shall be brought near the vessel.
11. No person shall cause to repair or repair either by the use of fire, welding, hot riveting or brazing any vessel used for the storage of flammable gas unless it has been thoroughly cleaned and gas-freed or otherwise prepared for safely carrying out such hot work and certified in writing, by a competent person, to have been so prepared. Where the vessel has been certified as gas-free, the certificate shall be preserved by the licensee for a period of not less than three months and produced to the licensing authority on demand.
12. No person shall enter any vessel used for the storage of a toxic or corrosive gas unless he is adequately protected by means of protective clothing, gas masks and such other equipments as may be required in the specific case.
13. Compressed gas shall be filled into or removed from the vessel through designated pipes of required specification and through transfer facilities shown in the approved plan.
14. The vessel shall not be filled between the hours of sunset and sunrise, unless adequate lighting of approved type is provided and except in such manner and such other condition or conditions as are specifically endorsed on the licence by the licensing authority.
15. All operations in the licensed premises shall be carried out by persons competent in such operation. Every person managing or employed on or in connection with the licensed premises shall abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and to the best of his ability, shall prevent any other person from doing such act.
16. The licensee shall provide for each licensed premises a minimum of two portable foam type or dry chemical type fire extinguishers of 9 kg. capacity each, which shall be kept ready at convenient location for immediate use in the event of any fire in addition to other fire fighting or other mitigating facilities required for flammable or toxic gases.
17. All valves in the premises must be permanently marked in a manner clearly indicating the direction of opening and shutting the valve.
18. Free access to the licensed premises shall be given at all reasonable times to any of the officers specified in

rule 70 and every facility shall be afforded to such officer for ascertaining that the rules and the conditions of this licence are duly observed.

19. If the licensing authority calls upon the holder of a licence by a notice in writing to execute any repairs in the licensed premises which are, in the opinion of such authority, necessary for the safety of the premises, the holder of the licence shall execute the repairs within such period as may be specified in the notice.
20. Every vessel shall be outside any building and shall be supported on well designed calculations.
21. No artificial light capable of igniting flammable vapour shall at any time be present within nine meters of the vehicle and the loading or unloading points during the transfer of the compressed gas and no person engaged in such transfer shall smoke.
22. All electrically equipment such as motors switches, starters used for transfer of liquefied petroleum gas shall be of flameproof construction conforming to IS/IEC 60079-1 to 11 or of a type approved by the Chief Controller.
23. Smoking, naked lights, lamps, source of fire or any other stimulant capable of igniting flammable vapours shall not be allowed inside the premises. Every person managing or employed on or in connection with licensed premises shall abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and to the best of his ability, shall prevent any other person from doing such act.
24. Any accident, fire ,explosion or untoward incident occurred within the licensed premises shall be immediately reported to the Chief Controller of Explosives, Controller, nearest police station and District Magistrate by quickest mode of communication.

For The Jt. Chief Controller of Explosives, South Circle, Chennai

भारत सरकार
Government of India
वाणिज्य और उद्योग मंत्रालय
Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)
Petroleum & Explosives Safety Organisation (PESO)
A और D - विंग, ब्लॉक 1-8, दूसरा तल, शास्त्री भवन, 26 हड्डोउस रोड, नुंगम्बक्कम
चेन्नै- 600006
A & D - Wing, Block 1-8, IInd Floor, Shastri Bhavan, 26 Haddous Road, Nungambakkam,
Chennai - 600006

E-mail : jtccechennai@explosives.gov.in
Phone/Fax No : 044 - 28287118,28281023,28281041,28287119/28284848

संख्या /No. : P/HQ/PY/15/524 (P163312)

दिनांक /Dated : 07/12/2022

सेवा में
/To,

M/s. M/s. Chemplast Sanmar Limited,
PVC Division, Karaikal Plant,
Melavanjore Village,
Karaikal,
Taluka: Karaikal,
District: KARAIKAL,
State: Pondicheri
PIN: 611002

विषय /Sub : Plot No, S. No. 39/3, 315,MELAVANJORE VILLAGE, NAGORE POST-611002,KARAIKAL REGION,PUDUCHERRY UT, Melavanjore Village, TR. Pattinam Panchayat, Nagor, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002 में स्थित विद्यमान पेट्रोलियम वर्ग B,C अधिष्ठापन में अनुज्ञप्ति सं P/HQ/PY/15/524 (P163312) के नवीकरण के संदर्भ में।
Existing Petroleum Class B,C Installation at Plot No, S. No. 39/3, 315,MELAVANJORE VILLAGE, NAGORE POST-611002,KARAIKAL REGION,PUDUCHERRY UT, Melavanjore Village, TR. Pattinam Panchayat, Nagor, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002 - Licence No. P/HQ/PY/15/524 (P163312) - Renewal regarding.

महोदय /Sir(s),

कृपया आपके पत्र क्रमांक OIN1215207 दिनांक 26/11/2022 का अवलोकन करें।
Please refer to your letter No.: OIN1215207, dated 26/11/2022

अनुज्ञप्ति संख्या P/HQ/PY/15/524 (P163312) दिनांक 26/04/2022 को दिनांक 31/12/2027 तक नवीनीकृत कर इस पत्र के साथ अग्रेषित की जा रही है।
Licence No. P/HQ/PY/15/524 (P163312) dated 26/04/2022 is forwarded herewith duly renewed upto 31/12/2027.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुज्ञप्ति के नवीकरण हेतु समस्त दस्तावेजों को अनुज्ञप्ति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व Jt. Chief Controller of Explosives, South Circle Office, Chennai कार्यालय को प्रेषित करें।
Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Jt. Chief Controller of Explosives, South Circle Office, Chennai, so as to reach his office on or before the date on which Licence expires.

कृपया पावती दें।
Please acknowledge the receipt.

भवदीय /Yours faithfully,

((डा.टी.एल.थनुलिंगम)
(Dr. T. L. THANULINGAM))
उप मुख्य विस्फोटक नियंत्रक
Dy. Chief Controller of Explosives
कृते संयुक्त मुख्य विस्फोटक नियंत्रक
For Jt. Chief Controller of Explosives
चेन्नै/Chennai

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(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : http://peso.gov.in देखें)
(For more information regarding status,fees and other details please visit our website: http://peso.gov.in)

अनुज्ञप्ति संख्या-(Licence No.) P/HQ/PY/15/524 (P183312)

नवीनीकरण के पृष्ठांकन के लिए स्थान
SPACE FOR ENDORSEMENT OF RENEWALS

पेट्रोलियम अधिनियम, १९३४ के उपबंधों या उनके अधीन बनाए गए नियमों या इस अनुज्ञप्ति की शर्तों का उल्लंघन न होने की दशा में यह अनुज्ञप्ति फिस में बिना किसी छूट के दस वर्ष तक नवीकृत की जा सकेगी। This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.	नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry of license	अनुज्ञापन प्राधिकारी के हस्ताक्षर और शाय Signature and office stamp of the licencing authority
1).	08/05/2008	31/12/2010	Sd/- Dr.Karunamay Pandey
2).	23/12/2010	31/12/2013	Sd/-
3).	19/12/2013	31/12/2016	Sd/- Dr. P. K. Rana Dy. Chief Controller of Explosives For Jt. Chief Controller of Explosives Chennai
4).	09/09/2016	31/12/2019	Sd/- Dr.Ashok Kumar Yadav Dy. Chief Controller of Explosives For Jt. Chief Controller of Explosives Chennai
5).	05/11/2019	31/12/2022	Sd/- Vijay kumar Dy. Controller of Explosives For Jt. Chief Controller of Explosives Chennai
6).	07/12/2022	31/12/2027	Dr. T. L. THANULINGAM Dy. Chief Controller of Explosives For Jt. Chief Controller of Explosives Chennai

यदि अनुज्ञप्ति परिसर इसमें उपबद्ध विवरण और शर्तों के अनुरूप नहीं पाए जाते हैं और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति मंजूर की गई है उनमें से किसी का उल्लंघन होने की दशा में यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्तिधारी प्रथम अपराध के लिए साधारण कारावास से, जो एक मास तक हो सकता है, या जुर्माने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और प्रत्येक पश्चातवर्ती अपराध के लिए साधारण कारावास से जो तीन मास तक हो सकता है, या जुर्माने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.

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प्ररूप XV
(प्रथम अनुसूची का अनुच्छेद 6 देखिए)
FORM XV
(see Article 6 of the First Schedule)

अधिष्ठापनों में पेट्रोलियम के आयात और भंडारकरण के लिए अनुज्ञप्ति
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुज्ञप्ति सं. (Licence No.) : **P/HQ/PY/15/524(P163312)** फीस रूपए (Fee Rs.) **24000/-** per year

M/s. M/s. Chemplast Sanmar Limited, PVC Division, Karaikal Plant, Melavanjore Village, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002 को केवल इसमें यथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम **380.00 KL** आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या **P/HQ/PY/15/524(P163312)** तारीख **26/04/2022** जो कि इससे उपाबद्ध है, में दिखाए गए स्थान पर भण्डारकरण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुज्ञप्ति अनुदत्त की जाती है ।

Licence is hereby granted to **M/s. M/s. Chemplast Sanmar Limited, PVC Division, Karaikal Plant, Melavanjore Village, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002** valid only for the importation and storage of **380.00 KL** Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No **P/HQ/PY/15/524(P163312)** dated **26/04/2022** attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुज्ञप्ति **31st day of December 2027** तक प्रवृत रहेगी ।
The Licence shall remain in force till the **31st day of December 2027**

पेट्रोलियम का विवरण /Description of Petroleum	अनुज्ञप्त मात्रा (किलोलीटरों में) /Quantity licenced in KL
वर्ग क प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	NIL
वर्ग क प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
वर्ग ख प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	80.00 KL
वर्ग ख प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
वर्ग ग प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	300.00 KL
वर्ग ग प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C,otherwise than in bulk	NIL
कुल क्षमता /Total Capacity	380.00 KL

July 9, 2007

For Chief Controller of Explosives
HQ, Nagpur

1). Amendment dated - 26/04/2022

अनुज्ञप्त परिसरों का विवरण और अवस्थान
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुज्ञप्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टियां संलग्न अनुमोदित नक्शे में दिखाई गई हैं **Plot No: S. No. 39/3, 315,MELAVANJORE VILLAGE, NAGORE POST-611002,KARAIKAL REGION,PUDUCHERRY UT, Melavanjore Village, TR. Pattinam Panchayat, Nagor, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002** स्थान पर अवस्थित है तथा उसमें निम्नलिखित **Two aboveground Petroleum Class B & one aboveground Petroleum Class C storage tanks together with connected facilities.** सम्मिलित हैं।

The licensed premises, the layout , boundaries and other particulars of which are shown in the attached approved plan are situated at **Plot No: S. No. 39/3, 315,MELAVANJORE VILLAGE, NAGORE POST-611002,KARAIKAL REGION,PUDUCHERRY UT, Melavanjore Village, TR. Pattinam Panchayat, Nagor, Karaikal, Taluka: Karaikal, District: KARAIKAL, State: Pondicheri, PIN: 611002** and consists of **Two aboveground Petroleum Class B & one aboveground Petroleum Class C storage tanks together with connected facilities.** together with connected facilities.

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A10

SANMAR

Chemplast Sanmar Limited

Karaikal Plant:
Melavanjore Village T R Pattinam Panchayat
Nagore 611 002 India
Tel + 91 4365 256 475/ 476
E-mail: csl@sanmargroup.com
www.chemplastsanmar.com
CIN L24230TN1985PLC011637

CSL/KKL/SAF-01/2024-25.
25th September 2024

The Inspector of Factories,
Karaikal.

Dear Sir

SUB: Submitting the Report of Mock drill conducted and Pressure vessel ET in Form 8

We are herewith submitting Report of "On site emergency - mock drill" conducted in our plant on 29.08.2024 and pressure vessel ET in form 8

Kindly acknowledge the receipt of the same.

Thanking you and assuring our best cooperation at all time.

Yours faithfully,
For Chemplast Sanmar Limited

S.Mathivanan,
Sr. Vice president - Operations.

25/09/2024

DESPATCHER
Office of the Inspector of Factories
Thiruvalluvar Kamarajar Administrative Complex
Nagore Road, Karaikal.

CHEMPLAST SANMAR LTD. MELAVANJORE

Responsible Care®

Chemplast Sanmar Limited

Karaikal

Emergency preparedness - Mock Drill Report

1. Type of Drill: On Site Emergency Mock Drill

2. Date of Drill: 29.08.2024

3. Mock drill Started:15:00Hrs Mock Drill Ended:16:00 Hrs

4. Assumed emergency scenario:

Ethylene pump suction MOV (Motor operated valve) upstream pipeline Crack.

5. No. of Observers: 05

Internal Observers & their Locations:

Internal Observers and Locations	1. S Selvaganesh – C2 CCR
	2.Mr B C Krishna Kumar– OHC
	3.Mr. M V Silambarasan – Security Gate
	4.S.Vishwanathan – E C C
	5.P Dhandapani –Safe Assembly point

6. External Observer details (if any):

1. Mr.Senthil kumar– Incident Site (DSS+)

7. Objectives of the mock drill:

- Observe the sequence of action.
- Response time.
- Role-play of individuals.
- Co-ordinate among various Coordinators.
- Shortcomings on recommendations for further improvements.

CHEMPLAST SANMAR LTD. KELAVANJURE

8. Description of Emergency Scenario:

S.No	Sequence of Activities	Time Hrs
1.	Field observer Mr. Robinson marco identifies the leak due to crack in ethylene pump suction MOV (Motor operated valve)upstream pipeline.	14:58
2	Field Officer tried to arrest the leak in pipeline .But can't able to arrest the leak and vapor spread in adjacent sides	15:00
3	Field officer informed to the Control room officer about the crack in ethylene pump upstream pipeline	15:00
4	The Control room officer informed to Work Incident Controller (WIC), Incident controller and shift in charge about the situation. Immediately WIC instructed Incident controller to inspect and report about the situation.	15:01
5	Incident Controller and Shift-in-charge reached the workplace and reported the situation to the Works main controller.	15:02
6	After discussing with Incident controller, Emergency was declared by the works main controller (Site Head).	15:02
7	Control room engineer Mr. Karunanithi activated siren and also announced continuously about emergency in Regional language and English through public addressing system.	15:04
8	EDC plant initiated to Safe Shutdown and plant stopped safely. All Maintenance work safely suspended, it was verified by emergency support team	15:06
9	The Incident controller directed the Task force team to attend the crack and leak in ethylene pump suction upstream pipeline and also instructed fire fighting team to activate the water curtain and fire monitor of C2 tank for reducing the spread of vapor in adjacent sides	15:07
10	Mock evacuation of the employees and contract workers were carried out. Head count also carried out as part of the Mock Drill	15:08
11	Mr. Elayaraja –Security guard lost his consciousness as due to ethylene vapor cloud at the work place and fall down near the Pump area. Immediately the message communicates to OHC and asks FMO to send the First aid coordinator to the spot with ambulance.	15:08

CHEMPLAST SANMAR LTD. MELAVAHJORE

12	Mean while, All contractors and employees were assembled in assembly point and head count was matched with attendance.	15:09
13	Ambulance reached the C2 area and Medical Emergency Support crew lifted the victim.	15:11
14	Ambulance reached back to OHC.	15:13
15	After arresting the leak from the crack, communication sent to the ECC and sent the Area protection coordinator to access the incident spot.	15:10
16	After VOC monitoring throughout the incident spot and getting clearance from the Area protection coordinator, the situation was explained to the ECC.	15:12
17	Treatment was provided to victim by Factory medical officer. The Emergency response team and works main controller reached the incident spot and OHC for access the situation.	15:15
18	The "All clear signal" was declared by WMC after ascertaining the situation by a long siren for 60 seconds.	15:16
19	Post-Mock drill debriefing meeting.	15:18
20	All return back to work spot.	15:20
21	Mock Drill ended	15:20

9. **Head Count Details:**

The head count was tallied.

Total No. of persons assembled in the assembly points	162
No. of persons retained in the respective sections for Maintaining production	121

10. **Observations & Recommendations from observers:**

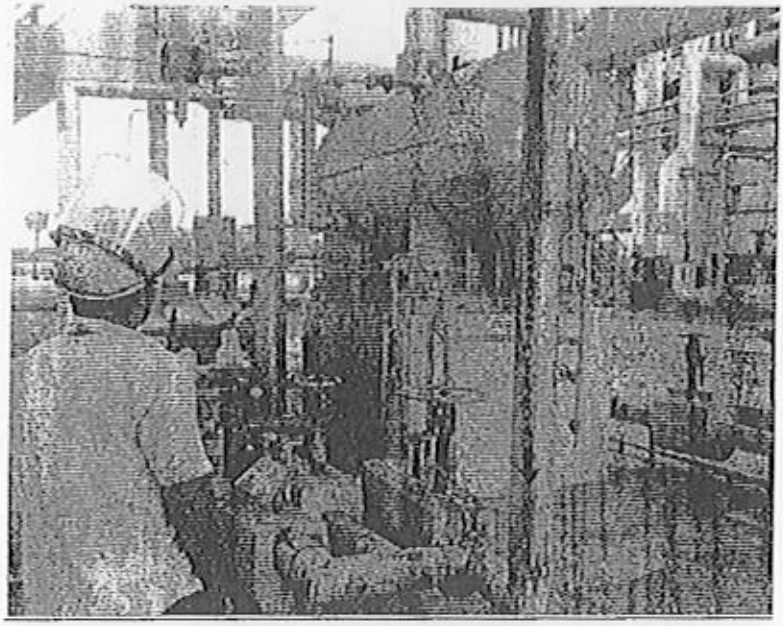
Positives:

- Experienced manpower to handle the emergency
- Availability of required infrastructure & resources
- Fire hydrant system – Good Working condition
- Quick response and Coordination of ERT
- Clear Communication received from Emergency Control Center.

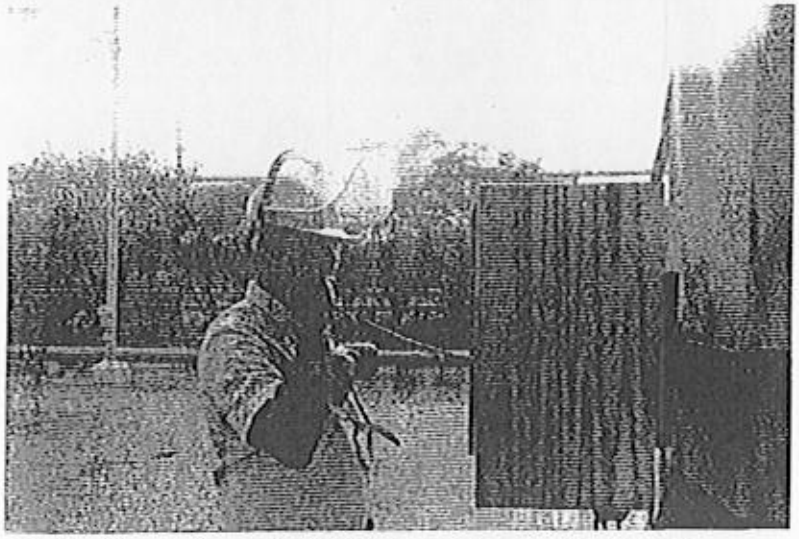
Area of improvement in the Incident location:

- Paging system was inaudible in Desalination plant
- Additional observers to be placed in remaining Assembly points.

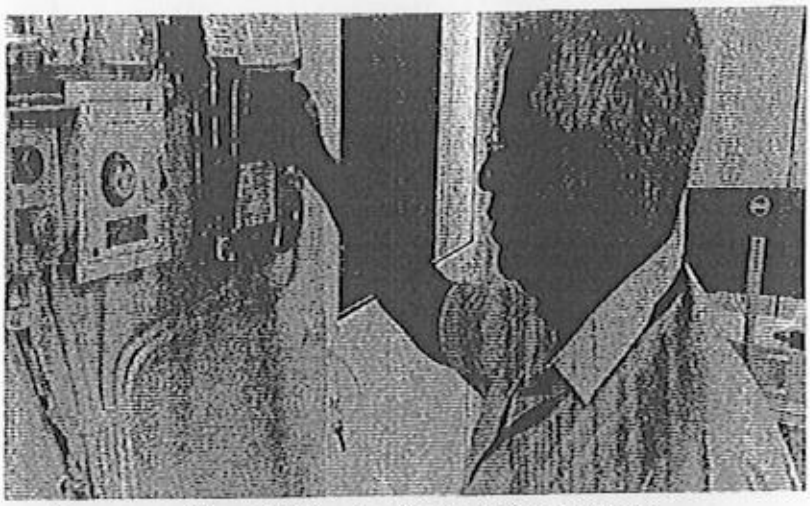
Mock drill Photos



Field Officer identifies leak in Ethylene pump suction mov (Motor operated valve) upstream pipeline



Field officer informs to the Control room engineer about the leak due to crack in Ethylene pump suction mov (Motor operated valve) upstream pipeline



Emergency Siren Wailing by Control Room Officer

Incident Controller and Shift In charge arrived the incident spot

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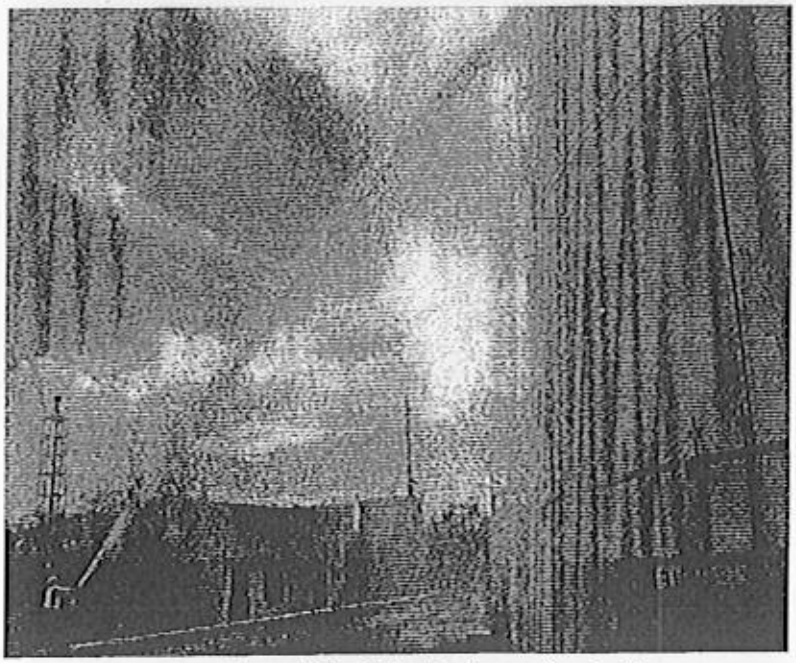
Task Force team controlled the vapor spreading to adjacent side by water monitor system



Water Curtain and Fire Monitor turned on in the Ethylene tank to vapor spreading to adjacent side

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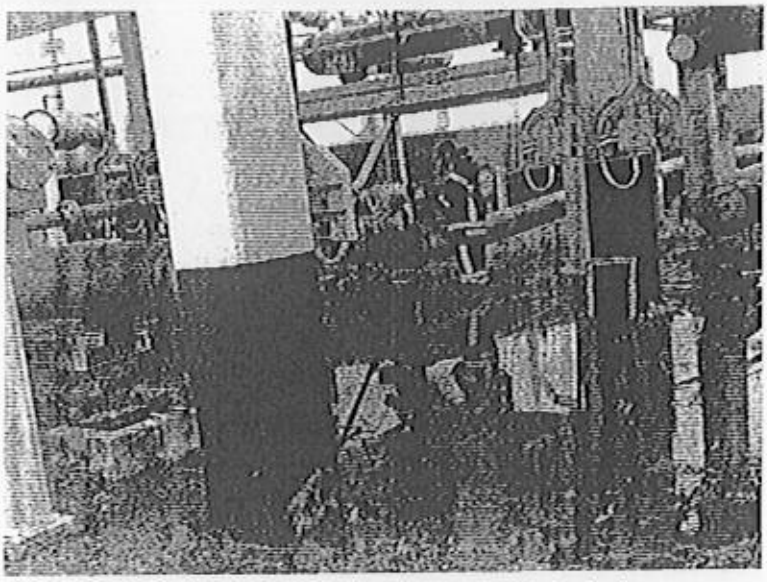

Task force team controlled and stopped the leak

One Victim found unconsciousness due to cold burn
near C2 Entrance

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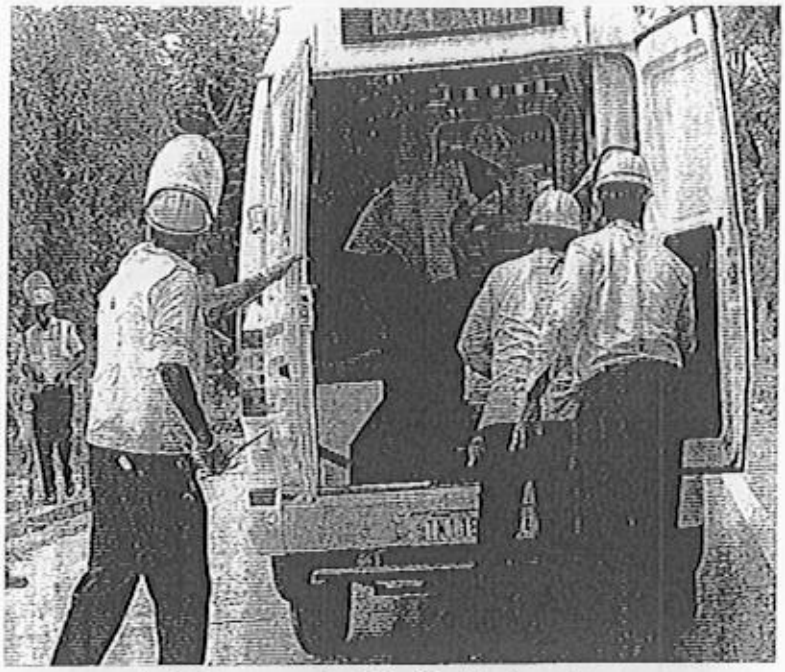

Ambulance reached the incident spot

First Aid team rescued the victim and mobilized to OHC

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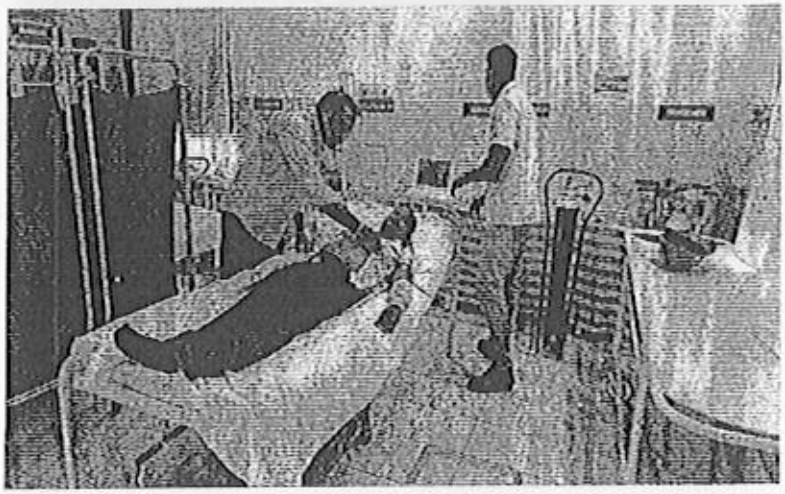
Except plant team workers, all workers were left the site



Victim admitted n OHC

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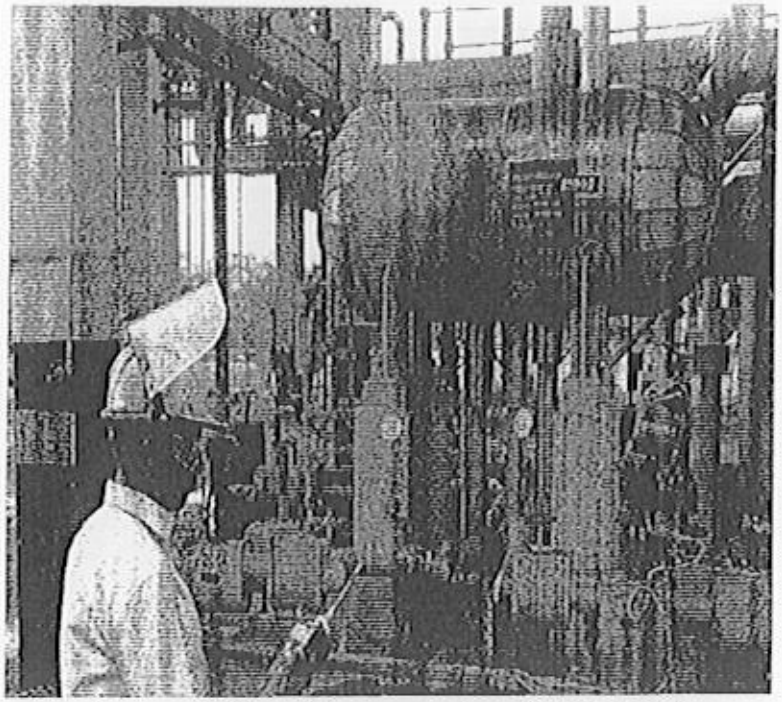

Area protection Officer ensured any VOC around the vaporizer by using VOC meter after attending the crack.

Head count verification in Emergency Assembly point

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Mock Drill de-briefing in Emergency Assembly point

WMC consulted with ECC regarding Incident spot status and declared all in control.

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All workers return back to the Work place

Reviewing the Observations with Site ERT members by WMC

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End of Report

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GOVERNMENT OF PUDUCHERRY
DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT
PUDUCHERRY POLLUTION CONTROL COMMITTEE
3rd Floor, Housing Board Complex, Anna Nagar, Puducherry - 605 005
Phone : (0413) 2201256 Fax : (0413) 2203494

LiFE Lifestyle for Environment

Form 2
[See rule 6(2)]

FORM FOR GRANT OR RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorisation: **HWM/1/2023/279094** and date of issue: **17/05/2023**
2. Reference of application No.: **279094** and date: **14/06/2022**
3. The occupier of **Chemplast sanmar limited** is hereby granted an authorisation based on the enclosed signed inspection report for hazardous or other wastes or both on the premises situated at **No.:315, Melavanjore Village, T R Pattinam Panchayat, Nagore Post, Karaikal Region, Puducherry U.T.**

Details of Authorisation

SN.	Schedule / Name of the Processes	Name of Hazardous Waste (with category No)	Quantity	Activities for which Authorization is issued
1	Schedule I/16 Production of caustic soda and chlorine	16.3 Brine sludge	3000 T/Annum	Generation, Storage and Disposal for landfilling in Treatment, Storage & Disposal facility.
2	Schedule I/5 Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems	5.1 Used or spent oil	35 T/Annum	Generation, Storage and Disposal to recyclers

4 The authorisation shall be valid for a period of **12/03/2025**

5 The authorisation is subject to the following general and specific conditions

(Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific conditions:

1. The occupier/generator shall be responsible for safe and environmentally sound management of hazardous and other waste.
2. The occupier shall follow the following steps for the management of hazardous and other wastes. (a) Prevention (b) minimization (c) reuse (d) recycling (e) recovery, utilisation including co-processing and (f) safe disposal.
3. The occupier shall store the hazardous and other wastes for a period not exceeding ninety days.
4. The hazardous and other wastes shall be stored temporarily in an isolated area earmarked for the purpose within the occupiers premises (it shall not be accessible to rain water) till scientific disposal.
5. The storage area shall be provided with impervious flooring with separate provision for individual category of waste and a sign of danger shall be placed at the storage site.
6. The occupier handling hazardous or other wastes shall maintain daily records of such operations of generation, handling, storage and disposal as per Form 3.
7. The occupier handling hazardous or other wastes shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time.
8. The labelling of package of hazardous or other wastes shall be done as per Form 8. The label shall be of non-washable material, weather proof and easily visible.
9. The occupier shall provide the transporter with the relevant information in Form 9, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per Form 8.
10. The authorisation for transport shall be obtained by either the sender or the receiver on whose behalf the transport is being arranged.
11. The transporter/sender of the hazardous and other wastes shall prepare and maintain manifest in Form 10. The unit shall ensure submission of green or grey copies of Manifest by the receiver to PPCC for every consignment.
12. Transportation of hazardous and other waste for final disposal to a facility existing in a state other than the state where the waste is generated, the sender shall obtain No Objection Certificate from the State Pollution Control Board of both the states.

13. Transportation of Hazardous and other waste for recycling, utilisation including co-processing or disposal through a State other than the States of origin and destination, the sender shall give prior intimation to the concerned State Pollution Control Board of the States of transit before handing over the wastes to the transporter.
14. The occupier or the operator, or the transporter shall immediately intimate PPCC through telephone, e-mail about the accident and subsequently send a report in Form- 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation.
15. The unit shall provide display board showing hazardous waste details as per the Honble Supreme Court directions.
16. Any increase in quantity of handling of hazardous and other wastes, any change in category of hazardous and other wastes and any change in method of handling operations shall be brought to the notice of the PPCC and fresh authorization shall be obtained.

C. Additional Specific conditions:

(i) The unit shall maintain records in Form-3 for the generation of brine sludge and also include brine sludge in Form-4 for annual return and annual inventory. The unit shall also generate manifest in Form-10 for every consignment.
(ii) The unit shall also explore the utilization of brine sludge for the manufacturing of bricks as per CPCB SOP in order to reduce the disposal of hazardous waste to landfilling.
(iii) The unit shall obtain necessary NOC from PPCC and KSPCB for the final disposal of brine sludge. The unit shall give prior intimation to SPCBs/PCCs of the States/UTs of transit incase of interstate transportation. The unit shall also submit a copy of the NOC obtained from KSPCB to this authority prior to transportation.
(iv) The authorization is subject to the conditions mentioned above and also to such conditions as specified in the Hazardous and Other waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time framed under the Environment (Protection) Act 1986.
(v) Puducherry Pollution Control Committee reserves the right to review impose additional condition or conditions, revoke, change or alter the terms and conditions of this authorization.

Date: 17/05/2023

Signature of Issuing Authority
Designation and Seal

Recd on 11/09/2020

GOVERNMENT OF PUDUCHERRY
DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT
PUDUCHERRY POLLUTION CONTROL COMMITTEE
III FLOOR, PHB BUILDING, ANNA NAGAR, PUDUCHERRY – 605 005
PH: 2201256 / 2203494; FAX: (0413) 2203494

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FORM – II

RENEWAL AND AMENDMENT OF AUTHORISATION TO THE OCCUPIER FOR HANDLING AND MANAGEMENT OF HAZARDOUS AND OTHER WASTE

04 SEP 2020

1. Number of authorisation and date of issue : 56/PPCC/HWM/AEE/2020/661
2. Reference of application (No. and date) : 6650 and 16.12.2019
3. The Occupier of **M/s Chemplast Sanmar Limited.,** is hereby granted an authorisation based on the enclosed signed inspection report for Generation, Collection, Storage and disposal of hazardous wastes on the premises situated at **No. 315, Melavanjore village, Nagore Post – 611002, Karaikal.**

Details of Authorisation

Schedule No.	Name of the Hazardous Waste or Other Waste	Quantity in TPA	Method of Disposal
5.1 of Schedule I	Used or spent oil	7.2	Shall be stored under the shed over an impervious flooring and disposed to authorized recycler
5.2 of Schedule I	Wastes/residue containing oil	2	Shall be stored under the shed over an impervious flooring and disposed for pre-processing or co-processing.
33.1 of Schedule I	Empty barrels/containers contaminated with hazardous chemicals /wastes	6	Shall be stored under the shed over an impervious flooring and disposed for utilization or recycling.

(1) The authorisation shall be valid for a period upto 12.03.2025

(2) The authorisation is subject to the following general and specific conditions

A. General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the PPCC.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorised person to take prior permission of the PPCC to close down the facility.
8. An application for the renewal of an authorization shall be made 90 days before the date of expiry.
9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
10. The occupier handling hazardous and other wastes shall submit annual returns containing the details specified in Form 4 to PPCC on or before the 30th day of June of every year for the preceding period April to March.

B. Specific conditions of Authorization:

1. The occupier/generator shall be responsible for safe and environmentally sound management of hazardous and other waste.
2. The occupier shall follow the following steps for the management of hazardous and other wastes. (a) Prevention (b) minimization (c) reuse (d) recycling (e) recovery, utilisation including co-processing and (f) safe disposal
3. The occupier shall store the hazardous and other wastes for a period not exceeding ninety days.
4. The hazardous and other wastes shall be stored temporarily in an isolated area earmarked for the purpose within the occupier's premises (it shall not be accessible to rain water) till scientific disposal.
5. The storage area shall be provided with impervious flooring with separate provision for individual category of waste and a sign of danger shall be placed at the storage site.
6. The occupier handling hazardous or other wastes shall maintain records of such operations of generation, handling, storage and disposal as per Form 3 on daily basis.
7. The occupier handling hazardous or other wastes shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time.
8. The labelling of package of hazardous or other wastes shall be done as per Form 8. The label shall be of non-washable material, weather proof and easily visible.
9. The occupier shall provide the transporter with the relevant information in Form 9, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per Form 8.
10. The authorisation for transport shall be obtained by either the sender or the receiver on whose behalf the transport is being arranged.

11. The transporter/sender of the hazardous and other wastes shall prepare and maintain manifest in Form 10. The unit shall ensure submission of green or grey copies of Manifest by the receiver to PPCC for every consignment.
12. Transit of hazardous and other waste for recycling, utilisation including co-processing or disposal through a State other than the States of origin and destination, the sender shall give prior intimation to the concerned State Pollution Control Board of the States of transit before handing over the wastes to the transporter.
13. The occupier or the operator, or the transporter shall immediately intimate PPCC through telephone, e-mail about the accident and subsequently send a report in Form- 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation.
14. Any increase in quantity of handling of hazardous and other wastes, any change in category of hazardous and other wastes and any change in method of handling operations shall be brought to the notice of the PPCC and fresh authorization shall be obtained.
15. The unit shall enter agreement for disposal of Hazardous waste category 5.2 Wastes/residue containing oil and submit a copy of the same to this authority within three months from date of issue.
16. The unit shall expedite the disposal of membrane cells, brine sludge and other waste generated during the dismantling of pipelines with necessary permission from PPCC.
17. The unit shall install online display board showing hazardous waste details as per the Hon'ble Supreme Court directions. (Board of size 6' x 4' installed outside the main gate) on daily basis.
18. The authorization is subject to the conditions mentioned above and also to such conditions as specified in the Hazardous and Other waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time framed under the Environment (Protection) Act 1986.

For and on behalf of PPCC

(SMITHA. R., I.A.S)
MEMBER SECRETARY
Puducherry Pollution Control Committee

To

M/s Chemplast Sanmar Limited, PVC Division
Melvanjore Village, TR Pattinam Panchayat,
Nagore, Karaikal - 611 002.

Copy to: Guard file

A12

Point wise compliance status & actions taken on the Integrated Guidance Framework for Chemicals Safety in Respect of the Isolated Storages and Industries Covered Under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989

#	Guidelines	Compliance status
A. Guidelines for Industries and Isolated Storages:		
REPORTING		
1	An occupier (of an industry or isolated storage) shall identify the major accident hazards and shall take adequate steps to prevent such major accidents and to limit their consequences to persons and the environment and shall provide the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety	Complied. • All possible major accidents hazards have been identified through various safety studies like QRA, HAZOP, Process Safety Audit, Hazardous Area Classification, Lightening Protection Study etc. • All the emergency scenarios captured in emergency response plan comprising of mitigation procedures along with individual responsibilities of each function and accordingly periodic mock drills are conducted to improve the emergency response & its effectiveness • Adequate training imparted to all operating personal for handling and controlling of such emergencies • Necessary safety equipments are made available in plant for the mitigation of emergencies • Well equipped OHC facility and the Doctor along with supporting staff to cater the medical emergencies of the plant are available
2	Where a major accident occurs on a site or in a pipe line, the occupier shall within 48 hours notify the concerned authority as identified in Schedule 5 (of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended) of that accident, and furnish thereafter to the concerned authority a report relating to the accidents in Schedule 6 (of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended)). However, the concerned authorities, local crisis group, District emergency authorities etc. have to be informed by the occupier as early as possible	Agree to comply in case of any major accident occurred
3	The occupier shall not undertake any industrial activity or isolated storage unless he has been granted an approval for	Complied. We always get prior approval from

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	undertaking such an activity by the concerned authorities and has submitted a written report to the concerned authority containing the particulars specified in Schedule 7 of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended. In case of an activity in which subsequently there is or is liable to be a threshold quantity or more of an additional hazardous chemical shall be deemed to be a different activity and the occupier has to take a separate approval for undertaking such activity	concerned authorities for any modification undertaken in our existing industrial activity or isolated storage. In case of an activity involving more than the threshold quantity for a chemical as per MSIHC Rules , we will ensure that a separate approval will be obtained from the regulating authorities
4	The occupier shall furnish a further report to the concerned authorities, in case the changes to the threshold quantity of hazardous chemicals are made	Complied. We get prior approval from concerned authorities in case of any changes in threshold quantity of hazardous chemicals
5	An occupier shall not undertake any industrial activity or isolated storage to which the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended) applies, unless he has prepared a safety report on that industrial activity containing the information specified in Schedule 8 of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended) and has sent a copy of that report to the concerned authority at least ninety days before commencing that activity	Agree to comply for industrial activity or isolated storage which is attracted by MSIHC Rules , the safety report will be sent to the concerned authority at least 90 days prior to the commencing that activity
6	The occupier of both the new and the existing industrial activities or isolated storage shall carry out an independent safety audit of the respective industrial activities with the help of an expert, not associated with such industrial activities. The occupier shall forward a copy of the auditor's report along with his comments to the concerned authorities within 30 days after the completion of such audit	Complied. • External safety audit is being conducted by a Third Party Auditor approved by Ministry of Labour and Employment of India • Auditor who is appointed for audit is not associated with our industrial activities as being an independent auditor and auditor's report with compliance status are being submitted to concerned authorities within time frame
7	The occupier shall update the safety audit report once a year by conducting a fresh safety audit and forward a copy of it with his comments to the concerned authorities	Complied. External safety audit is conducted by a Third Party Auditor approved by Ministry of Labour and Employment of India once in a year. Auditor's report with compliance status are being submitted to concerned authorities within time frame
8	The occupier, within 30 days of the completion of the safety audit, shall send a report to the Chief Inspector of Factories with respect to the implementation of the audit recommendations	Complied. Safety audit report with compliance status is submitted to Inspector of Factory after audit completion

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9	The occupier shall not make any modification to the industrial activity or isolated storage to which that safety report relates which could materially affect the particulars in that report, unless he has made a further report to take account of those modifications and has sent a copy of that report to the concerned authorities at least 90 days before making those modifications	Complied. We never do any modification of the industrial activity or isolated storage without getting prior approval from concern authorities
10	Where an occupier has made a safety report and that industrial activity or isolated storage is continuing, the occupier shall within three years of the date of the last such report, make a further report which shall have regard in particular to new technical knowledge which has affected the particulars in the previous report relating to safety and hazard assessment and shall within 30 days send a copy of the report to the concerned authority	Agree to comply with the requirements
11	For the purpose of enabling the concerned authority to prepare the off-site emergency plan, the occupier shall provide the concerned authority with such information relating to the industrial activity or isolated storage under his control as the concerned authority may require, including the nature, extent and likely effects off-site of possible major accidents	Agree to comply. We have prepared Off Site Emergency Plan and same has been submitted to concerned authorities
12	The occupier of an industry or isolated storage shall take appropriate steps to inform persons outside the site either directly or through District Emergency Authority who are likely to be in an area which may be affected by a major accident about the nature of the major accident hazard and the safety measures and the "Do's' and 'Don'ts" which should be adopted in the event of a major accident. The occupier of a new industry or isolated storage shall take these steps, before that activity is commenced	We have conducted several awareness programmes to nearby communities on "Do's' and 'Don'ts" during industrial emergency as well as during the off-site drills
13	The industries/isolated storages shall update the comprehensive safety audit, on-site emergency plans and risk analysis reports annually and ensure that the reports are furnished to the concerned authorities	We wish to inform your good office that the Onsite Emergency Plan is revised and submitted periodically as & when required
14	The industry or isolated storage shall conduct comprehensive hazard identification and risk assessment (HIRA) to identify the non-compliances and take corrective actions for the non-compliances identified. Emergency plans shall be established to deal with leakages/accidents. The safety & hazard audit should identify the control measures necessary to be taken during an emergency	• Hazard Identification and Risk Assessment (HIRA) is available to identify the non-compliances and necessary corrective actions are taken • On & Off site Emergency Plans are available to deal with leakages/ accidents
15	A detailed study on the risk assessment and disaster management shall be carried out by the industry/isolated storage. Hazard identification and evaluation in a local community, preparation of standard operating procedures for accident prevention, preparedness and response, onsite emergency plans etc. have to be reviewed at least once in a	• All possible major risks & hazards have been identified through various studies like QRA, HAZOP, Process Safety Audit, Hazardous Area Classification, Lightening Protection Study etc.

	year	• All the emergency scenarios are captured in emergency response plan and periodic mock drills are conducted to improve the emergency response • Adequate training imparted to all local communities & operating personal for handling such emergencies
16	In the industries/isolated storages where gas leakages are suspected, an emergency plan to vent out/neutralize the gases safely should be prepared	An emergency plan to vent out/ neutralize the gases safely & the procedures derived for each emergency and complied
17	All industries and isolated storages should have mitigation plans for spillages/leakages of hazardous chemicals, fires, explosion or any other accident	Mitigation plans for spillages/leakages of hazardous chemicals, fires, explosion or any other accident are available in our On and Off Site emergency Plans along with mitigation and practiced & familiarized with mock drills periodically.
18	Standard Operating Procedure (SOP) for the steps to be taken during emergency situations/accidents shall be prepared by all industrial activities/isolated storages that are handling hazardous chemicals	SOPs available for emergency situations & accidents detailing on the steps to be followed during emergency situations/ accidents
TESTING		
19	The pressure test and leak test must be ensured after replacement of valves, pipes, joints etc. as per the original equipment manufacturer (OEM) manual or as per standard established procedure	Complied. Whenever replacement of valves, pipes, joints etc. are done, pressure test & leak test are carried out before installation according to the established system procedure
20	Check valves, relief valves should be installed at appropriate locations. Flow meters, sensors, measuring devices have to be regularly calibrated. Vents from relief valves shall be directed to a safe place	Complied. • Check Valves and Safety Relief Valves are installed in appropriate locations • Measuring devices are calibrated at defined interval and redundancy for measuring devices are also ensured
21	Seals, glands and gaskets shall be regularly inspected, without dismantling. Leak detectors should be provided for all piping, valves, seals, flanges, and other pertinent equipment	Complied. Mechanical Integrity programme available and LDAR (Leak detection and Repair) program is followed for the fugitive VOC emission as per the protocol
22	All hazardous chemicals carrying piping should be periodically inspected for failed insulation/vapour barrier, rust and corrosion. Damaged and deteriorated piping/equipment should be replaced	Complied. Mechanical Integrity programme available for periodic inspection of insulation, rust and corrosion. In case of any damage/deterioration the pipe/equipment is replaced

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23	Operation and process control systems like Supervisory Control and Data Acquisition (SCADA) and Leak Detection and Repair (LDAR) systems should be adopted by the major accident hazard installations	Complied. • SCADA available for operation and process control devices • LDAR programme carried out by third party for hazardous installations
24	The safety measures including valve regulated systems shall be regularly checked and the concerned workers involved in the activity shall be properly trained	Complied. Inspection programme available for valve regulated systems and the concerned workers involved in activities are trained periodically
25	Periodic inspection of equipment and machineries w.r.t. safety aspects should be done	Complied. Periodic inspection available for equipments and machineries w.r.t safety aspects of machine guarding, equipment earthing etc.
26	Portable gas masks should be kept at critical locations for use in any emergency	Complied. Portable half face and full face cartridge type organic-gas masks provided to all employees working in toxic gas area and spare portable gas masks kept in strategic locations like Emergency Control Center, OHC etc.
27	Material Safety Data Sheets of raw materials & products should be made available to all the concerned personnel	Complied. MSDS of raw materials & products available in Shop floor, Laboratory, Stores, OHC and Emergency Control Center & updated periodically
28	The design of storage tanks, pressure vessels etc. should be as per applicable standards. The material of the storage tanks, pressure vessels etc. should be of adequate strength and chemically inert for the chemicals to be stored. The inspection of storage tanks, pressure vessels etc. should be as per standard protocols	Complied. The design of storage tanks, pressure vessels are done as per standards and inspection is carried out by competent person authorized by Chief Inspector of Factories and Boilers, Puducherry & Petroleum & Explosives Safety Organization
29	All the vessels should be examined periodically by a competent person under the Factory Act/applicable extant laws	Complied. All the pressure vessels examination (External, Hydro Test, Ultrasonic Thickness Test) are carried out by competent person authorized by Chief Inspector of Factories and Boilers, Puducherry and inspection report is submitted in Form 8 Inspector of Factory
30	Blanketing of tanks for fire protection of volatile/flammable chemicals should be considered	Nitrogen blanketing is done on the required areas, vulnerable for fire risk.

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31	Free Fall of any flammable material in the vessel has to be avoided. All solvents and flammable material storage tanks should be at a safe distance from the Process plant and required quantity of material should be charged in reactor through appropriate safe mode	Complied. Flammable material storage tanks are in safe distance from the process area
32	Earth connection should be provided to all solvent handling equipment, pipelines, reactors, vessels etc. for protection from electric current/ static electricity	Complied. Earth connection provided to all the equipments, pipelines, reactors, vessels for protection from electric current/ static electricity
33	Separate safety manual should be prepared for each equipment along with the emergency management plan	Complied. Safety manual available for equipments with emergency management plan
34	Periodic testing of firefighting equipment should be conducted	In-house and third party testing/inspections are carried out for firefighting equipments
DUTIES		
35	Mock drills must be conducted regularly at every six months by the industries/isolated storages in controlled environment on actions to be taken during accidents, gas leakage, failure of critical process parameters etc.	Complied. Onsite emergency mock drill are conducted once in a three months covering various emergency scenarios
36	It shall be ensured that the chemical storage tanks should be appropriately located so that adequate space to take action during emergency situation is available	Complied. Adequate space available for all the chemical storage tanks
37	A clear documented emergency procedure should be laid down which details the precise duties of all staff and arrangements for evacuation, rescue, first aid etc. during an emergency	Complied. Onsite emergency procedure available with duties of all staffs and arrangements available for evacuation, rescue, first aid etc. during emergency
38	All pipework containing hazardous chemicals shall be identified by colour coding or labelling (as per standards notified by Bureau of Indian Standards) and shall be protected to prevent corrosion/damage. The practice to identify the parts of the system that contain gas or liquid and the direction of flow should be followed	Complied. Colour code and labeling available as per IS standard for hazardous chemicals and direction flow marking is also done
39	The industry or isolated storage shall install sensors with alarm system for detecting leakage of hazardous chemicals. Emergency ventilation, electricity tripping system to stop the process, sprinkling system to contain the leaked hazardous chemicals/gases etc. may be interlinked with the sensors for taking a prompt action in case of leakage/emergency	Complied. Sensors with alarm system installed for hazardous chemicals (like Chlorine, VOC) and deluge sprinkler system installed for flammable storage area
40	Suitable gas sensors and alarm system should be installed in the industrial unit/isolated storages at appropriate locations where emission of gas is suspected so that any leaked gas is detected and the employees are immediately alerted. In sensitive areas of the unit where gas leakages are suspected, the unit shall work out an emergency prepared plan to	Complied. Sensors with alarm system installed for hazardous chemicals and connected to control room to alert employees

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	neutralize/vent out the gases safely	
41	The industries/isolated storages should install automatic alarming system to alert its personnel as well as surrounding localities simultaneously in case of emergency situation and likelihood of emergency situation if any process parameter goes out of control	Complied. Automatic alarming system available to alert in case of emergency situation related to process
42	There should be auto alarm system to alert the employees in case of any deviations noticed in process parameter that may cause emergency	Complied. Automatic alarming system available for alerting the employees to take appropriate action
43	Only fully trained and qualified operators shall be permitted to operate the industrial processes involving hazardous chemicals. Training to all employees on Standard Operating Procedures, production process, safety aspects etc. should be provided. Refresher trainings should be conducted at least every year regarding safety and emergency preparedness aspects associated with the industrial process/isolated storage. The employees shall be given hands on experience with the product process under the supervision of senior employees. The industries/isolated storages only after ensuring that adequate training is imparted to its employees should engage the employees for independent works	Complied. • Qualified (Master of Science in Chemistry) and trained operators are only allowed to operate industrial process • SOP, Process and Safety trainings conducted to employees • Yearly refresher training for emergency responses also given to employees • Mock drills are being carried out periodically
44	The industries and isolated storages should impart regular training to the staff to make them aware about process details, process functionalities. The employees should be trained to deal with emergencies arising out of leakage, abnormal temperature & pressure, increased emissions, pump failures, failure of air pollution control devices or effluent treatment plant, shock loads or any other accidents likely to occur. Overall the industries and isolated storages should be prepared for emergency response readiness & effectiveness in terms of major & minor accidents	Complied. • Regular awareness training given to staff about process detail and its functionalities • Emergency response training is conducted by third party
45	Any non-operational industry/isolated storage shall carry out proper risk study and safety audit before resuming the operations	Various risk studies and safety audits conducted and all the recommendations are complied
46	Hazard and operability study must be carried out strictly and regularly by the industries and isolated storages. The concerned personnel should be made aware of the hazard and safety aspects associated with the process and material handled by them	Complied. HAZOP (Hazard and Operability) study carried out at regular interval and staffs are made aware of hazard & safety aspects associated with the process
47	The industry/isolated storage should procure chemicals from authorized dealers only. The spent solvents shall be procured from only those industries/solvent recyclers that are authorized by respective State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs)	• Chemicals are procured from authorized dealers only • Spent solvents are not used in our industry at all
48	The industry/isolated storage shall provide essential Personnel	Complied.

	Protective Equipment (PPE) to all the concerned employees and make it mandatory that the employees have to wear PPE during working hours	Mandatory PPE (Safety helmet, Safety shoe and Goggles) and Job specific PPE (Face shield, Gloves, Full body aprons) provided to all the employees
49	Occupational Health surveillance i.e., periodical health check-up of the employees should be conducted by the industries/ isolated storage	Complied. Periodic health check-up conducted to all the employees
50	The industries/isolated storages have to ensure self-compliance regarding recruiting competent staff, imparting Industrial, Environmental and Safety training to the staff, conducting safety audit, onsite emergency plans with record maintenance and information to SPCBs/PCCs/Concerned Authorities	Complied. Self compliance audit conducted internally and information shared to the concerned authorities for taking action towards improvement
51	The distancing criteria for storage of hazardous chemicals have to be followed as per extant safety guidelines/rules. The chemicals should be stored as per compatibility and separate area for flammable, corrosive, explosive and toxic chemicals should be earmarked	Complied. Hazardous chemicals storage area designed as per chemical compatibility matrix
52	The labelling of hazardous chemical storing containers shall be as per extant rules. The concerned employees should be made aware of the risks associated with the stored hazardous chemicals and appropriate precautions that need to be taken	Complied. NFPA labeling made available for all chemical storage containers
53	To contain any spillage or leakage of hazardous chemicals or any uncontrolled reaction that may cause any emergency or accident, the industries/isolated storages should have sufficient stock of neutralizing chemicals, absorbents, reaction quenchers with proper equipment and trained manpower	Complied. • Adequate neutralizing chemical available for quenching spill or leak of hazardous chemicals • Well trained manpower available to contain the spill or leak
54	Emergency ambulance services should be arranged in the industrial zones along with experienced doctors and paramedic staff	Complied. We wish to inform your good office that we have dedicated ambulance and fully equipped OHC with experienced doctor and paramedic staff in our factory
55	Safety in operation greatly depends on proper commissioning of an industry/isolated storage and hence utmost care should be taken to monitor every aspect during erection and maintenance schedules or other areas which require proper planning	Agree to comply for every aspect of erection and maintenance schedules
56	The industries/isolated storages shall ensure that their premises should be constructed in accordance with the local government regulations	Complied. All our constructions are in accordance with the local government regulation
57	A control room to deal with the emergencies should be commissioned by the industries/isolated storages. A quick response team of responsible officers should be constituted having duly assigned duties to be executed during emergencies	Complied. • Control room available to deal with the emergencies • Response team is available as per our On-Site emergency plan

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58	The industry/isolated storage should conduct public awareness programmes in the surrounding localities about do's & don'ts during emergency situations on annual basis	Several industrial emergency awareness program has been conducted to the surrounding communities
59	'Mutual Aid Scheme' among industries to meet required response measures during chemical emergencies should be adopted	Complied. Our industry has signed 'Mutual Aid Agreement' with nearby industries
60	Emergency contact numbers should be readily available at the isolated storages or industrial installations similar to 'Crisis Alert System' or Red Book	Emergency contact numbers displays is available in predominant locations of our factory
61	Placing/indicating hazard signs at appropriate places in the isolated storage or industry or outside the shop floor (within the premises) should be done	Cautionary notices in English and local languages are displayed in appropriate locations of our factory
62	Increased automation that avoids physical handling of dangerous chemicals and substances should be brought into practice	Complied. In our plant maximum possible areas are fully automated and there is very few manual operation in our activities
63	The industry/isolated storage should have proper firefighting arrangements in accordance with The Factories Act, 1948/ applicable extant laws	In our factory we have micro processor based automatic fire fighting facility in accordance with applicable rules/laws
64	All emergency valves and switches and emergency handling facilities should be easily accessible	Complied . In our factory all emergency valves, switches and emergency handling facilities are located in easily accessible areas
65	Safety audit reports shall be made online for public	Agree to comply by accessing of public through our website
66	To ensure safety during operation/handling/storage of hazardous chemicals, the industries/isolated storages wherever and as applicable, shall obtain requisite clearances from The Chief Inspector, Factories and Boilers/Department of explosives/Fire Department etc. without fail	The factory is in operation for several years now and necessary details pertaining to safety during operation/ handling/storage of hazardous chemicals and its hazards have been informed to The Chief Inspector, Factories and Boilers/Department of Explosives/Fire Department etc. and necessary clearance received
67	The industries isolated storages shall ensure that the effluent generated during any accident because of firefighting/ decontamination activities etc. should be disposed in scientific manner after proper treatment. The hazardous wastes generated after any accident must be disposed in accordance with the extant rules	• In our plant we have state of art Effluent Treatment Plant (ETP) and facility available to divert all used fire fighting/contaminated water to ETP & is treated in a scientific manner • Hazardous waste generated are disposed to authorized persons as per State Pollution Control Committee
68	Occupiers of storage installations like warehouses/tank farms are required to prepare an On-Site Emergency Plan and make available information regarding any possible off-site consequences to the District Collector to enable him to include	Possible emergencies that could occur in our storage installations like warehouses/tank farms are identified and same as incorporated in onsite

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	the same in the Off Site Emergency Plan for the district or the particular area	emergency plan/Offsite emergency plan. List of emergencies and plans to meet them and same has already submitted to district crisis group authorities
69	In order to avoid accidents, the following measures may be taken while establishing a warehouse/tank-farm. These should also be carried out in existing installations to enhance safety : i. Hazardous chemical storages should be located away from densely populated areas from drinking water sources, water bodies or from areas liable to flooding ii. The location should have easy access for transport and emergency services iii. Adequate emergency requirements like water for firefighting, drainage to prevent ground water contamination, standby source of electricity etc. should be provided iv. The layout of warehouses should be designed in accordance with nature of materials to be stored. The construction material should be non-flammable v. Floors should be impermeable to liquids and should be designed for easy cleaning vi. Drains should not be connected directly to water ways or public sewers. The drains should be connected to an interceptor pit vii. Proper embankments to contain any accidental spillage should be provided for all hazardous materials storages viii. Loading and unloading operations are to be done with utmost care ix. Procedure for receipt, despatch and transport should be clearly laid down x. Details of hazardous chemicals, access and escape routes, available emergency & firefighting equipment should be available xi. In addition to a storage plan, a safe operation of a storage facility should have planning for safety training, personal protective clothing and equipment, spillages and leaking containers, waste disposal, first aid, fire detection and protection equipment, environment protection, proper on site emergency plan etc.	Complied. The factory is in operation for several years now and our plant has designed considering all said Environment Health & Safety requirements. Company has been certified for ISO 45000 towards Safety & Occupational health & ISO 14000 for Environmental Management

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70	Wherever applicable, the industries or the isolated storages shall invariably comply with the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended), The Major Accident Hazard Control Rules, 1997, The Factories Act, any other applicable rules or guidelines issued by the respective Government of State/Union Territory, The Ministry of Labour & Employment, Petroleum and Explosive Safety Organization, Oil Industry Safety Directorate etc.	All activities related to our industry are complying with the MSIHC Rules, 1989 (as amended), The Major Accident Hazard Control Rules, 1997, The Factories Act, and all other applicable rules or guidelines issued by the respective Government of State/Union Territory, The Ministry of Labour & Employment, Petroleum and Explosive Safety Organization, Oil Industry Safety Directorate etc.
B. Guidelines on the On Site Emergency Plans (for industries and isolated storages):		
1	The occupier of an industrial activity/isolated storage shall prepare and keep up-to-date an on-site emergency plan containing details specified in Schedule 11 of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended) detailing how major accidents will be dealt with on the site on which the industrial activity is carried on and that plan shall include the name of the person who is responsible for safety on the site and the names of those who are authorized to take action in accordance with the plan in case of an emergency	Complied. On Site Emergency Plan is periodically reviewed and required details are mentioned appropriately
2	The occupier shall ensure that the emergency plan prepared takes into account any modification made in the industrial activity/isolated storage and that every person on the site who is affected by the plan is informed of its relevant provisions	If any modification made in our factory, emergency preparedness plan is reviewed and same is communicated through a proper training to all workers in the factory
3	The occupier shall prepare the emergency plan in the case of a new industrial activity or isolated storage, before that activity is commenced	No new industrial activity or isolated storage were done recently. However when there is any new industrial activity or isolated storage, emergency preparedness plan will be reviewed
4	The occupier shall conduct a mock drill of the on-site emergency plan every six months and a detailed report of the mock drill conducted shall be made immediately available to the concerned authorities as and when demanded	We wish to inform your good office that the Mock Drill is conducted once in three months and its outcomes are submitted to Inspector of Factories, Karaikal
5	With every change or modification made in a factory, operation or process, the on-site emergency plan may have to be modified and updated to keep it meaningful and effective. An on-site emergency plan should contain the following key elements: i. basis of the plan and hazard analysis ii. accident prevention procedure/measures iii. accident/emergency response procedure/measures and iv. recovery procedure	• On Site Emergency Plan is reviewed during any modification in factory and for any changes in process/operation • During revision of our Onsite Emergency Plan, all said key elements are captured

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	Proper planning by industries/isolated storages helps in reducing the chances of accidents. For proper planning, the following needs to be considered: i. risk associated with the process technology ii. safety measures iii. siting and layout of industry/isolated storage iv. emergency preparedness and v. compliance with the regulatory requirements Assessing the hazard potential of an installation is the first step in planning for emergencies. Preliminary Hazard Analysis which comprises hazard identification and vulnerability analysis should always be carried out at the conceptual stage for all installations including small and medium installation. However, Major Accident Hazard (MAH) installations, both existing and proposed ones, should carry out a risk analysis. <u>Hazard Analysis:</u> Hazard analysis is a critical component in planning for emergencies. To analyse the safety of a major installation as well as its potential hazards, a hazard analysis should be carried out covering the following areas: i. The toxic, reactive, explosive or flammable substance in the installation that constitute a major hazard ii. The failures or errors that may cause abnormal conditions leading to a major accident iii. The consequences of a major accident for the workers, people living or working outside the installation and the environment iv. Preventive measures for accidents v. Mitigation of the consequences of an accident <u>Vulnerability Analysis:</u> Considering the maximum loss scenario e.g. catastrophic vessel rupture, the occupier may estimate the vulnerable zone or the zones which will be affected by the release of hazardous chemicals. It should be borne in mind that every effort should be made to confine the vulnerable zone within the factory premises. In order to achieve this, the following could be adopted: i. Reduce the quantity of hazardous substances stored ii. Split the hazardous storages into number of smaller ones iii. Isolate the storages that might lead to cascading effect	

	iv. Substitute extremely hazardous substances with less hazardous substance Risk Analysis: Risk analysis can provide a relative measure of the likelihood and severity of various possible hazardous events and enable the emergency plan to focus on the greatest potential risks. Risk analysis involves an estimate of the probability or likelihood that an event will occur	
E. Guidelines on Safety Audit:		
1	The safety audits should be conducted by the competent agency to be accredited by an Accreditation Board to be constituted by the Ministry of Labour and Employment, Government of India in this behalf and in absence of such Accreditation Board by a competent agency approved by Chief inspector of Factories	Complied. External safety audit is conducted by a third party auditor approved by Ministry of Labour and Employment of India or by a competent agency approved by Chief Inspector of Factories
2	The qualifications and experience of safety auditor should be as per extant rules	We wish to inform your good office that the safety auditor qualifications and experience is followed as mentioned in rules
3	The safety auditor carrying out the safety audit under Rule 10 of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (MSIHC Rules, 1989) shall bring out the status of compliance by the occupier in his safety audit report in addition to the compliance of provisions of the MSIHC Rules, 1989 (as amended from time to time) and the state CIMAH Rules. A copy of the safety audit report to be forwarded by the safety auditor to the concerned authority as identified under schedule 5 of the MSIHC Rules,1989	Agree to comply
4	The audit should be carried out as per IS 14489:2018 – Code of Practice on Occupational Safety & Health Audit (as amended time to time)	Complied . External safety audit is carried out as per IS 14489:2018 – Code of Practice on Occupational Safety & Health Audit only
5	The broad areas to be covered in the Safety Audit should be: i. Occupational Health and Safety Management ii. Physical, Mechanical and Electrical Hazards and their Control Measures iii. Chemical Hazards and their Control Measures iv. Fire and Explosion Hazard and their Control Measures v. Industrial Hygiene/Occupational Health vi. Accident/Incident Reporting, Investigation and Analysis vii. Emergency Preparedness (On-Site/Off Site) viii. Safety Inspection	All the scopes said in rules are captured in our external safety audit
6	The Objectives of Safety Audit should be : i. To examine the existing procedures, system and control measures for hazards	Complied . All the Objectives of the Safety Audit is full filled in our external safety audit

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	ii. To assess the adequacy of hazard identification iii. To identify potential hazards not covered by the existing safety systems, procedures and practices iv. To identify the adequacy of the control measures put in place by the occupier v. To bring out any deviation from the set procedures and statutory noncompliance vi. To recommend improvements for better effectiveness of the existing safety system, procedures & practices and also other measures of hazards control vii. To recommend system, procedure and control measures for identified hazards viii. To study compliance with statutory provisions and relevant codes of practice and recommend actions to be taken, wherever there is noncompliance ix. To identify the compliance with the provisions under these guidelines