



Ref: To,

Date: DATE: 28.11.2025

The Regional Officer,
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office, Guwahati,
4th Floor, Housefed Building, GS Road, Rukminigaon Guwahati-781022

Ref. No: NRL/ENV/MOEFCC/25-26/05

Sub: Submission of Half Yearly Compliance status on Environment Stipulation during the period
April'25 to September'25.

Dear Sir,

Kindly find enclosed herewith the point wise Half Yearly EC Compliance Status pertaining to the conditions of following ECs granted to Numaligarh Refinery.

SN	Project Name	MoEF&CC File No.	EC issued Date
1	Petroleum Refinery at Numaligarh (3 MMTPA)	J-11011/16/90-IA. II	May 31,1991 (EA)
2	BS-III Motor Spirit Project at NRL	J-11011/92/2003-IA II (I)	February 13, 2004
3	Coke-Calcination Unit (0.1 MMTPA)	J-11011/203/2003-IA II (I)	March 22, 2004
4	Diesel Quality Up-gradation Project (DQUP) at NRL	J-11011/272/2008-IA-II (I)	November 10, 2008
5	Paraffin Wax	J-11011/113/2009-IA-II (I)	September 5, 2012
6	Naphtha Splitter Unit	J-11011/534/2009-IA-II (I)	September 12, 2012
7	Installation of new LPG mounded bullet & up-gradation of existing LPG bottling plant and BS-IV HSD project at NRL	J-11011/150/2015-IA-II (I)	December 9, 2016
8	Expansion of the refinery from 3 MMTPA to 9 MMTPA	J-11011/274/2015-IA-II (I)	July 27, 2020
i.	Expansion of the refinery from 3 MMTPA to 9 MMTPA-1 st amendment	J-11011/274/2015-IA-II (I)	May 6, 2021
ii.	Expansion of Numaligarh Refinery from 3 MMTPA to 9 MMTPA for inclusion of 2.4 KTPA Green Hydrogen Generation Unit-2 nd amendment	J-11011/274/2015-IA-II (I)	May 9, 2025
9	Proposed Polypropylene Project (PPU) of Capacity 360 KTPA	J-11011/274/2015-IA-II(I)	August 1 st , 2024

Hope the above will meet the requirement.

Yours faithfully,

Kothapalli Srinivas

Deputy General Manager (Tech Service-Environment)

Enclosures: 1. Noise monitoring (Annexure-I), 2. Stack Emission, Ambient & Effluent data (Annexure-II/III/IV), 3. Fugitive monitoring report (Annexure V), Ground water around SLF (Annexure-VI) 5. CER Report (Annexure-C), 5. Env Expenditure (Annexure-D), 6. Form-4 (Annexure-E) 7. Form-V (Annexure-F) 8. CREP Compliance report (Annexure-G)

Cc: Member Secretary, PCBA, Assam

Cc: Regional Director, CPCB, Shillong

1. Project Name: Petroleum Refinery at Numaligarh (3 MMTPA)

MoEF&CC File No.: J-11011/16/90-IA. II

EC Issued Date: May 31st, 1991

Sl. No.	A. Specific Condition	Remarks
1	The layout of the refinery should be so planned within the proposed site so as to ensure that it is situated as far to the eastern side of the site as possible, to ensure that there is the maximum possible distance from the eastern boundary of the Kaziranga National Park. The layout of the site of refinery may be finalised in consultation with this Ministry.	The layout of the refinery was finalised in consultation with MoE&F. Longitude 93° 43' 30" E & Latitude 26° 37' 30" N. Latest plot plan submitted to IRO, GHY.
2	The residential site as proposed should not be to the west of the refinery as it is only 19.5 kms from the boundary of Kaziranga National Park. It should be shifted further away, but keeping in view the distance from the Garampani Sanctuary, which is only 24 kms south of the proposed refinery site. The newly proposed site of the residential colony should be settled to the satisfaction of this Ministry.	The NOC for the residential site has been issued by MoE&F vide No.J-11014/2/91 IA.II dated 18 th January 1994 with six conditions. Details on the present status of compliance on these conditions are enclosed as Annexure A .
3	The National Highway-37 should be diverted away from the Kaziranga National Park and that portion of this road through and along the National Park (From Jakhalabandha to Bokakhat) to be denotified from all highway records and handed over to the National Park Authorities for regulating traffic. No movement of personnel, material or equipment for the project shall take place on the existing National Highway-37. The realignment of the National Highway-37 would be finalised in consultation with the Ministry of Environment and Forests, so that the wildlife habitat in the nearby Mikir Hills and areas rich in biological diversity therein are protected. Work on the diversion of NH-37 will start before construction of the refinery begins and the Ministry of Petroleum should ensure that the road is completed before the commissioning of the project.	The original NGT application no.174 of 2013 in this matter was disposed of in July'18. The same has been sent to IRO, GHY earlier.

4	A No Development Zone must be notified before the project construction starts within a radius of 15 kms all around the refinery site, except towards the northwest where the no development zone would extend into the Eastern boundary of the Kaziranga National Park.	The Govt. of Assam has already notified the “No Development Zone” on 19.01.95. The MoEF circular for the same is as on 5 th July’1996.
5	No pipeline will be laid through the Kaziranga National Park and adjacent wildlife habitats in the Mikir Hills. Pipeline alignment shall be finalized in consultation with the Ministry of Environment and Forests to minimize impact on environment and forests.	NRL has not laid any pipeline through KNP.
6	The project authority must strictly adhere to the stipulations made by the SPCB and the State Government.	The stipulations laid down by SPCB, Assam and the State Govt. are adhered to. The status on the compliance report has been regularly sent to PCBA, Regional Office, Golaghat. A copy is enclosed as Annexure B.
7	Any expansion of the plant either with the existing product mix or new products can be taken up only with the prior approval of this Ministry.	This is complied with as and when a change or expansion is contemplated. Any expansion of the plant either with the existing product mix or new products will be taken up with prior approval of the Ministry.
8	The gaseous emissions from various process units should conform to the standard prescribed by the concerned authorities, from time to time. At no time, the level should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Automatic online stack analyzers have been provided in all the major stacks for continuous monitoring of SO ₂ , NO _x , CO & SPM. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. Monitoring reports of stack emissions are regularly submitted to the PCBA Regional Office, Golaghat, CPCB Regional Office alongwith Half yearly EC compliance report. Real-time emission data has been transmitted to CPCB server on continuous basis. Monitoring data attached as Annexure-II/III
9	A minimum of five air quality monitoring stations should be set up in the downwind direction as well as where maximum ground level conc.	As an action of compliance, five (5) nos. of ambient air quality monitoring stations have been set up at the following locations:

	<p>is anticipated. Furthermore, stack emission should be monitored by setting up of automatic stack monitoring units. The data on stack emission should be submitted to the SPCB once in three months and to this Ministry once in six months, along with the statistical analysis. The air quality monitoring stations should be selected on the basis of modelling exercise to represent the short-term ground level conc.</p>	<p>SS 1: Inside the refinery (Near WT No.5). SS 2: At the Eco-Park in NRL Township. SS 3: At the Raw Water Intake. SS 4: Near the NH-39 bypass. SS 5: Near the Kaziranga Wildlife Sanctuary at Agoratoli.</p> <p>-Ambient Air Quality monitoring at the above locations is being carried out in line with NAAQS-2009 in totality.</p> <p>Automatic online stack analysers have been provided in all the major Stacks for continuous monitoring of SO₂, NO_x, CO & SPM. The monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office, Shillong and to the MoEFCC Regional Office, Shillong alongwith Half yearly EC compliance report.</p> <p>NRL has installed 2 Continuous Ambient Air Monitoring System inside the refinery premises and realtime emission data has been transmitted to CPCB server on continuous basis.</p> <p>Monitoring reports for the period is enclosed as Annexure – II/III</p>
10	<p>There should be no change in the stack design without the approval of SPCB. Alternate Pollution control system and proper design (Steam Injection System) in the stack should be provided to take care of excess emissions due to failure in any system of the plant.</p>	<p>Prior approval of SPCB will be taken for any change in the stacks design. Pollution control measures like – Low NO_x burners, Steam Injection System, Low excess air firing, ID and FD fan, Stack dampers have been provided.</p>
11	<p>Only natural gas after de-sulphurization has to be used as fuel with low NO_x burners.</p>	<p>Permission has been obtained from MoE&F, New Delhi vide No. J-11011/16/90-IA.II(I) dated 22 May,1996 to use Naphtha, which is produced in the refinery itself. Low NO_x burners have been installed in all the refinery furnaces.</p> <p>Internal Fuel Oil with very low sulphur and Sweet Fuel Gas (with <10 ppm H₂S) that is produced as a part of process by processing low sulphur Assam Crude and & natural gas also used in Mixed fuel furnaces as most of the furnaces of process units are operated with dual fuel firing. Refinery operation cannot be dependent on</p>

		single fuel and alternate fuel is required for reliable and smooth operation of the refinery.
12	Fugitive emissions should be monitored continuously.	<p>Regular monitoring of fugitive emission has been carried out using GMI since May, 2005 onwards.</p> <p>The GMI survey has been carried on all gas/vapour valves, light liquid valves, hydrogen valves, light liquid pump seals, hydrocarbon compressor seals, hydrogen compressor seals, safety relief valves, flanges, connections, open-ended lines, drains, tankages, furnaces etc in line with the MoEF notification 2008.</p> <p>Fugitive emission report attached as per Annexure V.</p>
13	All gaseous emissions in the system shall be taken to the flare system and the flare should be smoke-less and non-luminous.	All gaseous emissions have been taken to the flare system. A non-luminous ground flare has been installed as regular flare. However, additionally, an elevated flare has been also installed for using during emergencies.
14	A sulphur recovery plant should be commissioned along with the refinery.	The Sulphur Recovery Block (SRB) has been commissioned along with the refinery and has been under continuous operation since September'2000.
15	Zero discharge of effluents should be ensured and built into the system. In case the effluent has to be discharged due to process disturbances etc. the contributing unit shall be immediately stopped from operation and will not be re-started without bringing the system to normalcy. To meet the emergency needs adequate number of effluent quality monitoring stations must be set up in consultation with the SPCB	<p>Treated water discharge to outside environment directly from ETP via a dedicated pipeline has been discontinued since October'2006 and since April, 2007 township effluent also is being routed to the refinery ETP.</p> <p>Presently there is no dedicated facility for discharging Treated effluent from ETP directly to outside environment. About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints.</p> <p>For pollutant level measurement pH, TOC (for measurement of COD & BOD), TSS analyzer have been installed.</p> <p>Treated effluent quality is enclosed as Annexure-IV.</p>

		Action has been initiated for achieving ZLD for the entire refinery as directed by MoEFCC in the EC amendment of NREP for inclusion of Green Hydrogen Project granted on 09.05.2025.
16	Guard ponds of sufficient holding capacity to take care of monsoon rains should be provided.	Guard ponds (of capacity: 5329 m3) and Surge tank (of capacity: 5760 m3) for oily water sewer (OWS) and contaminated rainwater system (CRWS) have been provided in the Effluent Treatment Plant.
17	The solid waste from the ETP and waxy sludge should be incinerated.	The Chemical & Oily Sludge generated from ETP operations is disposed in the Secured Landfill. Tank Bottom Oily Sludge generated is disposed off through Bioremediation and is also sold through auction to CPCB approved recyclers. NRL has installed an Incinerator only for disposal of non-hazardous incinerable wastes.
18	The solid waste (other than waxy sludge) dumping area should be made impervious so that the ground water, is not affected due to leaching and seepage of associated water containing pollutants. The solid waste disposal plan should be submitted to the Ministry once the process design and technological package is finalized.	As per the recommendation of NEERI's report on Solid Waste Management, scheme for disposal of solid waste through Secured Landfill had been prepared. NRL has a Secured Land Fill facility of capacity around 6000 m3 as per the latest CPCB guidelines. Also, NRL has constructed Bio-remediation facility in line with the for disposal of oily sludge generated during cleaning of tanks. Alternately, some quantity of oily sludge being disposed by selling to authorized recyclers. Solid waste disposal plan prepared by NEERI in July 1999 submitted to IRO, GHY. The ground water quality around the Secured Landfill site is monitored on a regular basis. Ground water monitoring report has been attached as Annexure VI.
19	The project authorities should recycle the waste to the maximum extent and the recycling plan should be submitted along with a comprehensive EIA.	All types of wastes generated from the refinery are recycled to the maximum extent possible. -The recycling plan for all types of wastes have been submitted to the MoE&F, Shillong vide letter no. NRL/NG/ENV/2.1/2 dated May'23, 2002.

20	A detailed risk-analysis based on Maximum Credible Accident analysis should be submitted once the process design and the layout are frozen. Based on this a disaster management plan has to be prepared and after approval by the concerned nodal agency, should be submitted to this Ministry.	NEERI was engaged for Quantitative Risk Assessment including Maximum Credible Accident (MCA)analysis, Hazard Assessment and Evaluation, Disaster Management Plan (DMP) and Emergency Preparedness Plan (EPP). The report was submitted to the MoE&F on 03.02.97. Quantitative Risk Assessment is carried out every 5 years. The Emergency Response and Disaster Management Plan was certified on 28.12.2022 and the certification is valid till 27.12.2025.
21	A comprehensive EIA report covering one year (4 seasons) data should be submitted once the process design and technology package and layout are frozen. The Ministry or any other competent authority may stipulate any further conditions after reviewing the comprehensive impact assessment report	CEIA report prepared by NEERI has been submitted to MoE&F on 22.04.96.
22	A comprehensive study of the ecological status and likely impact of development should be initiated in consultation with the Ministry of Environment and Forests. The proposal should be submitted to this Ministry within three months	This is included in the CEIA report and submitted.
23	A green belt with a minimum width of 500 mts should be provided and the green belt development plan taking into account various aspects including attenuation of noise and air pollution should be submitted to this Ministry within six months.	Initially, as per EC granted for the Numaligarh Refinery Project, MoEF had stipulated a 500m wide green belt all around the refinery based on the EIA of NRL carried out by NEERI. On request from NRL, the width of the Green Belt was later reduced from the suggested width of 500m to 100m because of the reason that almost all the surrounding areas are having tea garden with shade trees. A wide natural green belt already existed all around the refinery. Accordingly, a Green Belt covering a total area of around 56 hectares of land and around 100m width around the refinery and around 25m width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15 th October, 2001). Periodically, massive plantation is carried out in the Green Belt so as to provide a natural barrier for attenuation of noise and air

		<p>pollution. Nos. of local variety have been planted including some fruit-bearing samplings in & all-around Green Belt. Phase-wise replantation is in progress in various locations in Green Belt, inside the refinery, and in and around the township to increase the density. Initiatives for plantation under the Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Dibrugarh (28 Ha.).</p>
24	<p>The rehabilitation plan for the persons to be displaced from the project site including township should be prepared and submitted to the Ministry for approval within 3 months. Plan should inter-alia contain rehabilitation site details, the facilities and compensation package to be provided.</p>	<p>Rehabilitation of the displaced persons from the refinery site has been done by the State Govt. NRL has paid the compensation as fixed by Collector. Similar action has also been taken in case of those displaced from the Township site for which land acquired. Amenities like drinking water facility, building primary school, constructing roads in the villages etc. have been contributed by NRL.</p>
25	<p>The project authority must set up a laboratory facility for the collection and analysis of samples under the supervision of a competent technical person, who will directly report to the Chief Executive.</p>	<p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to the General Manager (Technical Services).</p>
26	<p>A separate environment management cell with suitably qualified people to carry out various functions should be set up under the control of a senior executive who will report directly to the head of the organization.</p>	<p>A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by General Manager (Technical Services) has been continuously working for constant improvement, monitoring, safeguarding and reporting of environmental activities of the refinery. Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Moreover, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all</p>

		the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.
	a). The Ministry may revoke clearance if implementation of the conditions is not satisfactory.	Noted
	b). The above conditions will be enforced inter-alia under the provisions of the Water (Prevention & Pollution) Act, 1981, and Environment (Protection) Act, 1985 along with their amendments.	Noted
Sl. No.	Condition	Remarks
I	The hill slopes should not be used for civil construction purposes	Noted.
II	Land use planning of the colony and the land around it should be finalized in construction with the State Town Planning Department.	Noted.
III	More open space should be left and the building construction may be done by acquiring minimum land and the houses should be constructed on ground plus two floors basis.	Noted. Open space left within the township is around 82% of the total area.
IV	Township site should not involve any forest area.	Township is constructed only in the permitted area
V	The existing forest cover towards the west and north of the proposed colony site should not be disturbed.	It is not disturbed.
VI	No organized human settlement or private colonies should be allowed in the hill or the areas adjoining the hill. (Atleast in a radius of 10 kms).	The Govt. of Assam has already notified the “No Development Zone” on 19.01.95.

2. Project Name: BS III Motor Spirit Project at NRL

MoEF&CC File No.: J-11011/92/2003-IA. II (I)

EC Issued Date: February 13, 2004

Sl. No.	A. Specific Condition	Remarks
1	The company shall ensure strict implementation/compliance of the terms and conditions mentioned vide Ministry's letter No. J-11011/16/90-IA. II dated 31.05.1991.	Complied.
2	The company shall ensure that the total sulphur emission from the Assam refinery (including MS Quality Improvement Project) shall not exceed 128 kg/hr as sulphur (256 kg/hr as SO ₂). M/s NRL should maintain regular record of sulphur balance in the refinery. Off gases from the proposed unit should be treated in amine absorption and regeneration unit meant for H ₂ S removal for desulphurization of off gases. Performance evaluation of sulphur recovery block should be done regularly. Data on VOC should be monitored and submitted to the Ministry. The continuous emission monitoring systems for SO _x and NO _x in the major stacks with proper calibration facilities should be installed. The low NO _x burners should be installed in all the furnaces.	<p>The total sulphur emission from the refinery including Motor Spirit Project being maintained below 128 kg/hr as Sulphur (256 kg/hr as SO₂).</p> <p>-Regular sulphur balance of the refinery is maintained and the average SO₂ emission from the refinery during this period is 62.58 kg/hr which is well below the limit.</p> <p>-Off gases from the proposed unit has been treated in the amine absorption and regeneration unit.</p> <p>-Performance evaluation of Sulphur Recovery Block is done on a regular basis.</p> <p>-Fugitive emission data for MS is provided in Annexure V.</p> <p>-Continuous emission monitoring for SO₂, CO, PM and NO_x have been provided in all the stacks.</p> <p>-Ultra low NO_x burners have been provided in all the furnaces.</p>
3	Additional water requirement shall not exceed 1200 m ³ /hr. The total quantity of effluent generation should not exceed 3830 m ³ /day as indicated in the EMP of which (3530 m ³ /d from the existing and 300 m ³ /d from the proposed unit). Treated effluent should be recycled and rest should be discharged after primary, secondary and tertiary treatment into the Dhansiri river through 11 km long	The additional water requirement due to this project is very minimal as compared to the present requirement and is maintained within the limits. Treated water discharge to outside environment directly from ETP via dedicated pipeline has been discontinued since October'2006 and since April 2007 township effluent also is being routed to the refinery ETP.

	<p>pipeline. The treated effluent should comply with the prescribed standards.</p>	<p>Presently there is no dedicated facility for discharging Treated effluent from ETP directly to outside environment. About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints. Treated effluent quality is enclosed as Annexure-IV.</p>
4	<p>As reflected in the EIA/EMP, the spent catalyst (0.33 TPM) along with small quantity of oily and chemical sludge should be disposed off in secured landfill site within the plant premises. The leachate from the landfill site should be sent back to the effluent treatment plant. The ground water quality around the secured landfill site should be monitored regularly and data submitted to the Ministry/CPCB/SPCB. The biological sludge generated from the ETP should be used as manure/fertilizer for the green belt.</p>	<p>Spent catalyst is disposed off through authorized recyclers as per Hazardous Waste Management Handling and Transboundary Movement Rules 2016. The oily/chemical and Bio sludge generated in ETP is disposed off in the Secured Land Fill Facility (SLF) after recovering the oil by centrifuging. As per the requirement, leachate generated is routed back to the IRS of ETP for further processing. The ground water quality around the Secured Landfill site is monitored on a regular basis. Ground water monitoring report has been attached as Annexure VI.</p>
5	<p>Oil spill response facilities should be in place, in accordance with OISD guidelines with regard to the likely risks associated with transportation of finished products. All recommendations made in the risk analysis report should be complied with during design, construction and operation stages to contain the risk within the plant boundary.</p>	<p>Oily wastewater & contaminated rainwater from various units is routed through OWS (Oily Water Sewer) & CRWS (Contaminated Rain Water Sewer) to ETP for necessary oil removal and treatment in various sections. The slop oil is recovered in ETP and sent to OM&S for needful reprocessing in process units.</p> <p>The Storm Water Channel from various units are connected and channel through Oil Catchers and also Hay Filters& Oil absorbent booms are installed at various locations. The final outlet of storm water channel is closed immediately in case of any accidental oil carryover and is trapped in the oil catcher for necessary removal. The accumulated oil from the oil catchers is lifted with the help of MOSRU (Mobile Oil Spill Recovery Unit).</p> <p>Recommendations as per Risk Analysis report have been adhered to. Quantitative Risk Assessment is carried out every 5 years.</p>
6	<p>Green Belt of adequate width and density as per the CPCB guidelines should be provided to mitigate the effects of fugitive</p>	<p>A Green Belt of width around 100 m surrounding the refinery and around 25 m around the NRMT covering a total area of about 56</p>

	emissions all around the plant in consultation with the local DFO. The bio sludge should be used as manure in the Green Belt development.	hectares has been provided with adequate trees and proper density. Massive plantations have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. Nos of local variety have been planted including some fruit-bearing samplings in & all around Greenbelt. Further, to increase the density in the Green Belt, fresh plantation is carried out at regular intervals. Within the NRL premises, a few gardens have been developed near various units including one in ETP with varieties of flowering plants. Also, different varieties of saplings are planted in the roadside areas and through-out the refinery. Initiatives for plantation under Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Dibrugarh (28 Ha.) The oily/chemical and Bio sludge generated in ETP is disposed off in the Secured Land Fill Facility (SLF) after recovering the oil by centrifuging.
7	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act and the West Bengal Factories Rules.	Health check-up is conducted and the records are maintained accordingly.
Sl. No.	General Condition	Remarks
1	The project authorities must strictly adhere to the stipulations made by the Assam Pollution Control Board and the State Government.	The stipulations made by the Assam Pollution Control Board and the State Government are strictly adhered to.
2	No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	The Company shall implement all recommendations made in the EMP and Risk Analysis reports.	Complied.
4	At no time, the emissions 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 immediately put	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Automatic online stack analysers have

	out of operation and should not be restarted until the desired efficiency has been achieved.	been provided in all the major stacks for continuous monitoring of SO ₂ NO _x , CO & SPM with Real-time emission data transmitted to CPCB server on continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MoEF notification. Monitoring reports of stack emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office along with Half Yearly Compliance Report. Monitoring data attached as Annexure-II/III.
5	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	The equipments are monitored regularly at a distance of 01 mtr from the source and corrective measures are taken to maintain the noise level below 85 dBA. Control measures like silencer to vent, low noise Rotary equipment have been provided. PPE use is mandatory in high noise areas and the same is ensured. The ambient noise levels all around the refinery are monitored regularly so as to maintain the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). Noise monitoring report conducted during the period is enclosed as Annexure-I
6	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 1994 and 2000. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained.	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 1994 and 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the proposed unit have been obtained.
7	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage/disposal of hazardous wastes.	The rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, handling & Transboundary Movement) Rules, 2016 are adhered to. Annual return statements for Hazardous waste are also regularly sent to PCBA and attached as Annexure-E. In regard to the same, the authorization for Hazardous Waste has been

		obtained alongwith the Consolidated Consent and Authorization (CCA) from PCBA which is valid upto 2029.
8	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Adequate fund has been provided for implementing the conditions stipulated by the MOEFCC and the State Govt and not diverted for any other purpose. Environmental expenditure for the period is attached as Annexure-D
9	The stipulated conditions will be monitored by the Regional Office of this Ministry at Shillong / Central Pollution Control Board/The State Pollution Control Board. A six-monthly compliance report and the monitored data should be submitted to them regularly.	A six-monthly compliance report on the Environmental Clearance conditions along with the monitored data is being submitted regularly to the MoEF Regional Office, CPCB, Shillong and the SPCB, Regional Office, Golaghat, Assam. The same is being displayed in the company's website also.
10	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment & Forests at http://envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.	Advertisement regarding the environmental clearance for the Euro III MS Project was published in two local newspapers, The Assam Tribune (in English) and The Pratidin (in Assamese) on 18 th Feb'04 and copies of both were forwarded to the MoE&F Regional Office, Shillong vide letter no NRL/NG/ENV/2.1/11 dated 20 th Feb'04
11	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The same has been complied. Project commissioned on June 2006.
12	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted

13	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	Noted
14	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

3. Project Name: Coke Calcination Unit (0.1 MTPA)

MoEF&CC File No.: J-11011/203/2003-IA. II (I)

EC Issued Date: March 22, 2004

Sl. No.	A. Specific Condition	Remarks
1	The company shall ensure strict implementation / compliance of the terms and conditions mentioned vide Ministry's letter No.J-11011/16/90-IA.II dated 31.05.1991 and letter no. J-11011/92/2003- IA.II (I) dated 13th February 2004.	Complied
2	The company shall ensure that the total sulphur emission from the Assam refinery (including Coke Calcination Unit) shall not exceed the existing level of 128 kg/hr as sulphur (256 kg/hr as SO ₂).	The average SO ₂ emission during the period is 62.58 kg/hr which is well below the limit of 256 kg/hr.
3	The company should take adequate measures for control of fugitive emissions from the Coke handling system by	To control the fugitive emission from the Coke Calcination Unit, the following measures have been taken –

	installation of Bin vent filters and coke handling through closed conveyor system. Multiple cyclone separators should be installed for recovering coke particles from the Rotary Cooler Exhausts and bag filters to control suspended particulate matter from the waste heat recovery boiler exhaust gas.	<p>a) Bin vent filters provided to control even minor fugitive emissions from coke handling system.</p> <p>b) The major portion of coke handling is done through closed conveyor system.</p> <p>c) Cyclone separator provided for recovering coke particles from rotary cooler exhaust.</p> <p>d) Bag filters with automatic pneumatic back flushing system to control SPM from waste heat boiler at exhaust gas has been provided.</p> <p>e) The finished product of CPC has been packed in an automatic bagging machines, thus controls the fugitive emissions.</p> <p>f) Permanent fixed type water sprinkling arrangement have been made for control of coke dust.</p> <p>g) 2 mist cannons have been installed in CCU.</p> <p>f) A 100 m wide green belt all along refinery boundary wall and 25m around NRMT has been developed.</p>
4	Water requirement of 15 m ³ /hr should be met from the recycling of coke cutting water from Delayed Coker Unit. There should be no additional drawl of water for the CCU from the river Dhansiri	Coke cutting water from DCU is regularly used for quenching in CCU. There is no additional drawl of water beyond the permissible limit from the river Dhansiri for CCU.
5	The Company should install continuous stack monitoring system for online measurement for SPM, SO ₂ and NO _x .	Continuous stack monitoring systems for online measurement of SPM, SO ₂ NO _x and CO have been provided in the CCU stack with real time data transmission to CPCB.
6	The solid waste generated should be disposed off in the secured landfill site within the plant premises. The ground water quality around the secured landfill site should be monitored regularly and data submitted to the Ministry /CPCB/SPCB	<p>Normally the solid waste generated in the CCU (CPC dust) is recycled/ sold.</p> <p>Ground water around the Secured landfill is monitored regularly and monitoring report has been attached as Annexure VI.</p>
Sl. No.	General Condition	Remarks

1	The project authorities must strictly adhere to the stipulations made by the Assam Pollution Control Board and the State Government	The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to.
2	No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	The Company shall implement all recommendations made in the EMP and Risk Analysis reports.	The recommendations made in the EMP of the Comprehensive Environmental Impact Assessment and the Risk Assessment reports have been implemented for the Numaligarh Refinery, which includes CCU also as an integral part of the refinery. Also, Quantitative Risk Assessment for NRL is carried out every 5 years.
4	At no time, the emissions 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 immediately put out of operation and should not be restarted until the desired efficiency has been achieved	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO ₂ , NO _x , CO & SPM with Real-time emission data transmission to CPCB server on continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. Monitoring reports of stack emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office alongwith Half Yearly Compliance Report. Monitoring data attached as Annexure-II/III/IV.
5	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day-time) and 70 dBA (night time).	The major sources of noise generation in the CCU are the BFW pumps and the Air Blowers, having low duty. Strong foundations have been provided to mitigate the noise generation further. The equipments are monitored regularly at a distance of 01 mtr from the source and corrective measures are taken to maintain the noise level below 85 dBA. PPE use is mandatory in high noise areas and the same is ensured. The ambient noise levels all around the refinery are monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

		Noise monitoring result carried out in the Refinery during the period is enclosed as Annexure I.
6	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 1994 and 2000. Prior approvals from the Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained.	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 1994, and 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained.
7	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage/disposal of hazardous wastes.	The rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, handling & Transboundary Movement) Rules, 2016 are adhered to. Annual return statements for Hazardous waste are also regularly sent to PCBA and attached as Annexure-E. In regard to the same, the authorization for Hazardous Waste has been obtained along with the Consolidated Consent and Authorization (CCA) from PCBA which is valid upto 2029.
8	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and not diverted for any other purpose. Environmental expenditure for the period is attached as Annexure-D.
9	The stipulated conditions will be monitored by the Regional of this Ministry at Shillong /Central Pollution Control Board/State Pollution Control Board. A six-monthly compliance report and the monitored data should be submitted to them regularly.	A six-monthly compliance report on the Environmental Clearance conditions of NRL along with the monitored data has been submitted regularly to the MoE&F Regional Office, Shillong.
10	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with	The same has been complied. Advertisement regarding the environmental clearance for the Coke Calcination Unit was published in two local newspapers namely, The Assam Tribune (in English) and The

	the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment & Forests at http://envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.	Pratidin (Assamese) on the 26th March'04 and copies of both advertisements were forwarded to the MoEF Regional Office, Shillong vide letter no. NRL/TS/ENV/2.1/14 dated 27.03.04.
11	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The same has been complied.
12	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
13	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions	Noted
14	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

4. Project Name: Diesel Quality Upgradation Project (DQUP) at NRL

MoEF&CC File No.: J-11011/272/2008-IA. II (I)

EC Issued Date: Nov' 10, 2008

Sl. No.	A. Specific Condition	Remarks
1	The company shall comply with new standards/norms Notified by the Ministry for Oil Refineries vide G.S.R. 186(E) dated 18 th March 2008.	NRL is complying with the new standards/norms as per the MoEF notification 2008. The monitoring reports for gaseous emissions and liquid effluent are attached as per Annexure-II/III/IV Fugitive emission data is attached as per Annexure V. The compliance status of a few other points are as follows: Secondary seals in IFRT and EFRT tanks -installation of double seals in EFRT, IFRT completed. LDAR-programme has been implemented. VOC recovery system in ETP has been implemented.
2	The company shall comply with all the stipulations of environmental clearances issued vide letter No. J-11011/92/2003-IA.II(I) dated 13 th February 2004 and J-11011/203/2003-IA.II(I) dated 22 nd March, 2004.	Complied.
3	The process emissions (SO ₂ , NO _x , HC, VOCs, and Benzene) from various units shall conform to the standards prescribed by the Assam State Pollution Control Board from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO ₂ , NO _x , CO & SPM with real-time emission data transmission to CPCB server on continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. 5 manual ambient air quality monitoring stations and 2 continuous monitoring stations have been installed. Monitoring reports of emissions are regularly submitted to the PCBA Regional Office,

		Golaghat, and CPCB Regional Office. Monitoring data submitted in Annexure-II/III
4	The Diesel Quality Up-gradation Project (DQUP) shall be through Hydrocracker from 1.1 to 1.45 MMTPA, Hydrogen Unit from 38,000 to 48150 TPA, CDU/VDU modification of CDU without any feed change to take out additional 0.35 MMTPA diesel for Hydrocracker, Sulphur unit 14.7 to 19.5 TPD and associated modifications for the utilities, offsite and flare facilities.	Complied.
5	Quarterly monitoring of fugitive emissions shall be carried out as per the guidelines of CPCB by fugitive emission detectors (GMI Leak Surveyor) and reports shall be submitted to the Ministry's regional office at Shillong.	Presently being practiced and complied. Fugitive emission data has been provided as per Annexure V
6	For control of fugitive emission, all unsaturated hydrocarbon will be routed to the flare system and the flare system shall be designed for smoke less burning.	Complied.
7	The company shall strictly follow all the recommendation mentioned in the charter on corporate responsibility for environmental protection (CREP).	Complied. CREP compliance status has been provided in Annexure-G .
8	Occupational health surveillance of worker shall be done on a regular basis and records maintained as per the Factory Act.	Presently being practiced and complied.
9	Greenbelt shall be developed to mitigate the effect of fugitive emission all around the plant in a minimum 30% plant area in consultation with DFO as per CPCB guidelines.	A Green Belt covering a total area of around 56 hectares of land and around 100 m width around the refinery and around 25 m width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15 th October, 2001). Massive Plantation have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. No. of local variety have been planted including some fruit bearing samplings in & all around Green Belt.

		Further, it has been planned to increase the density by planting more saplings in the Green Belt in the days ahead. Initiatives for plantation under Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Dibrugarh (28 Ha.)
10	The Company shall make the suitable arrangement for disposal of catalyst waste and other wastes. The report of waste disposal shall be submitted to Ministry's Regional Office at Shillong.	Spent catalysts are disposed off through CPCB-approved recyclers. Other wastes are being disposed off as per Hazardous Waste Management, Handling, Disposal (Trans Boundary Movement), 2016 and the reports are being sent to Pollution Control Board. Form IV (Annual return for Hazardous waste management) is being regularly submitted to PCBA and attached as Annexure E.
11	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	Adequate measures taken up by NRL for prevention of fire hazards. Knockout drums are installed in both the flare systems.
12	To prevent fire and explosion at Oil and Gas facility, potential ignition sources should be kept to a minimum and adequate separation distance between potential ignition sources and flammable material shall be in place	Complied.
13	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied.
Sl. No.	General Condition	Remarks
1	The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board (SPCB) and the State Government and any other statutory body.	The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to.

2	No further expansion or modification in the project shall be carried without prior approval of the Ministry of Environment and Forests. In case of deviations or alternations in the project proposal from those submitted to the Ministry for clearance, a fresh reference shall be made to the Ministry.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system, the respective well site should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved. Provision of adequate height of stack attached to DG sets & flare is to be done.	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Adequate stack heights for DG set and flare is also maintained. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO ₂ , NO _x , CO & SPM with Real-time emission data transmission to CPCB server on continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. Monitoring reports of stack emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office. Monitoring data attached as Annexure-II/III
4	Wastewater shall be properly collected and treated so as to conform to the standards prescribed under EP Act & Rules and mentioned in the Consents provided by the relevant SPCB.	Wastewater generated is routed through the existing ETP for proper treatment. Treated effluent quality is enclosed as Annexure-IV .
5	The overall noise levels in and around the premises shall be limited within the prescribed standards (75 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Few noise generation sources in the project are the BFW pumps and the Air Blowers. Strong foundations are provided to mitigate the noise generation and the equipment are monitored regularly at a distance of 01 mtr from the source. PPE use is mandatory in high noise areas and the same is ensured. The noise levels all around the refinery is being monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time) Noise monitoring report for the period is enclosed in Annexure-I

6	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the expansion project, if required. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained. Requisite On-site and Off-site Disaster Management Plans have been prepared and implemented.
7	Disposal of hazardous wastes shall be as per the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	The rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules, 2016 are adhered to. In regard to the same, the authorization for Hazardous Waste has been obtained alongwith the Consolidated Consent and Authorization (CCA) from PCBA which is valid upto 2029.
8	The project authorities will provide adequate funds as non-recurring and recurring expenditure to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and not diverted for any other purpose. Environmental expenditure for the period is attached as Annexure-D
9	The company shall develop rainwater harvesting structures to harvest the runoff water for recharge of ground water.	Rooftop rainwater harvesting systems of capacity 20 KL/Day at LPG bottling plant implemented. Roof top rainwater harvesting from a major building having huge potential is being planned and action has been initiated for the same.
10	The stipulated conditions will be monitored by the concerned Regional Office of this Ministry /Central Pollution Control Board/State Pollution Control Board. A six-monthly compliance report and the monitored data should be submitted to them regularly. It will also be displayed on the Website of the Company.	A six-monthly compliance report on the Environmental Clearance conditions of the Numaligarh Refinery along with the monitored data is being submitted regularly to the MoE&F Regional Office. The same is being displayed in the company's website also.

11	<p>The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www.envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the concerned Regional office of this Ministry.</p>	<p>Advertisement regarding the environmental clearance for the Diesel Quality Upgradation Project (DQUP) was published in two local newspapers namely, The North East Times (in English) and The Amar Asom (Assamese) on the 16th November'08 and copies of both advertisements were forwarded to the MoE&F Regional Office, Shillong vide letter no. NRL/TS/ENV/2.3/07 dated 17.11.08.</p>
12	<p>A separate environment management cell with full-fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.</p>	<p>A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a Chief General Manager (Technical) has been continuously working for constant improvement, monitoring, safeguarding and reporting of environmental activities of the refinery. Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.</p> <p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to General Manager (Technical).</p>

13	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	The same has been complied.
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5. Project Name: Paraffin Wax Type (43,300 TPA) and Semi-Microcrystalline Wax Type A (4500 TPA) within the existing premises of 3MMTPA NRL

MoEF&CC File No.: J-110011/113/2009-IA. II (I)

EC Issued Date: Sept' 5th, 2012

Sl. No.	A. Specific Condition	Remarks
1	Compliance to all the environmental conditions stipulated in the environmental clearance letter nos. J011011/16/90-1A.II dated 31 st May, 1991, J011011/92/2003-1A.II (I) dated 13 th February, 2004, J011011/203/2003-IA. II (I) dated 22 nd March, 2004, J011011/272/2008-IA. II (I) dated 10 nd November, 2008 shall be satisfactorily implemented and monitoring reports submitted to the Ministry's Regional Office at Shillong.	Complied. Half yearly compliance report of all ECs regularly being sent to MoEF, RO along with the monitoring reports and displayed on NRL's website.
2	M/s Numaligarh Refinery Limited shall comply with new standards/norms for oil Refinery Industry and petrochemical industry notified under the Environment (protection)-Rules 1986.	The same is being complied as per the requirement.
3	Environmental clearance is subject to their obtaining prior clearance from wildlife angle due to nearby location of Kaziranga National Park (KNP) and clearance from the Standing Committee of the National Board for Wildlife as applicable.	The matter has been discussed with Chief Wildlife Warden of Assam and Director, Kaziranga National Park. As the proposed project has been constructed within the existing refinery premises, it does not require any additional land. As such, the requirement of approval from wild-life angle is not envisaged.

		Moreover, Approval from SC-NBWL is required for projects falling within 10 km radius from the boundary of PAs in compliance to <u>Supreme Court's order dated 4th December, 2006 against Writ Petition (Civil) no.460/2004</u> . Numaligarh Refinery is located at a distance more than 10 km radius (22.5 km) from the boundary of Kaziranga National Park- Hence no approval from SC-NBWL is required.
4	No heavy equipments shall be routed through Kaziranga National Park, for which only the route identified earlier shall be used.	Complied.
5	Adequate stack height shall be provided to fuel gas fired heaters as per CPCB/Assam pollution Control Board (APCB) guidelines to disperse waste heat into atmosphere. Low NOx burners shall be installed with on-line analyzers. Low sulfur fuels shall be used in boiler.	All the stacks are provided with adequate stack heights (min. 60 & 77 meters against the requirement of 30 meters). Low NOX burners are installed in all the stacks. Online SO2, NOx, CO, SPM analysers are installed in all the stacks with realtime data transmission to CPCB server. NRL is using low sulfur fuels in the boilers.
6	Continuous on-line stack monitoring equipment shall be installed for the measurement of particulate matter, VOCs, SO2, NOX, non-methanated Hydrocarbons (Benzene, Xylene and Toluene).	SO2, NOx, CO, PM analysers are installed in all the stacks with online monitoring and real time data transmission to CPCB server. For continuous monitoring of VOCs, Non-methanated hydrocarbon (Benzene, Xylene and Toluene), online analysers are available with the existing CAAQMS. Data attached as Annexure-II/III
7	Fugitive emissions from HVGO, MVGO and MIBK shall be recovered and controlled. Fugitive emissions in the work environment from product raw material storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by Assam Pollution Control Board.	Fugitive emission survey is being carried out with the help of GMI as a part of monitoring and control of fugitive emission. The GMI survey has been carried in all gas/vapour valves, light liquid valves, hydrogen valves, light liquid pump seals, hydrocarbon compressor seals, hydrogen compressor seals, safety relief valves, flanges, connections, open-ended lines, drains, tankages, furnaces etc. In case of any leak observed, the same is attended immediately in line with the requirement. Work environment monitoring is also conducted. Fugitive emission data attached as per Annexure V.
8	The process emissions [SO2, NOx, HC (Methane& Non-methane)] VOCs and Benzene from various units shall conform to the standards	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are

	<p>prescribed under the Environment Protection Act. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control systems adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.</p>	<p>provided in all the furnaces. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO₂, NO_x, CO & SPM with real-time emission data transmitted to CPCB server on continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. 5 manual ambient air quality monitoring stations and 2 continuous monitoring stations have been installed. Monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office along with Half Yearly Compliance report.</p> <p>Monitoring data submitted in Annexure-II/III</p>
9	<p>Ambient air quality monitoring stations [SPM, SO₂, NO_x, H₂S, mercaptan, non-methane-HC, and Benzene shall be set up in the complex in consultation with Assam Pollution Control Board, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modelling exercise to represent short term GLCS. Ambient air quality shall also be carried in one location at Kaziranga National Park for SO₂, NO_x, SPM, CO and HC.</p>	<p>As an action of compliance, five (5) nos. of ambient air quality monitoring stations have been set up at the following locations:</p> <p>SS 1 : Inside the refinery (Near WT No.5). SS 2 : At the Eco-Park in NRL Township. SS 3 : At the Raw Water Intake. SS 4 : Near the NH-39 bypass. SS 5 : Near the Kaziranga Wildlife Sanctuary at Agartoli.</p> <p>Ambient Air Quality monitoring at the above locations is being carried out in line with NAAQS-2009 in totality. NRL has installed one Continuous Ambient Air Monitoring System inside the refinery premises and real time emission data has been transmitted to CPCB server on continuous basis.</p> <p>One additional continuous Ambient Air Monitoring System inside the refinery premises as recommended by MoEFCC based on occurrence of maximum ground level concentration and down-wind direction of wind installed.</p> <p>Ambient air quality for the period is enclosed as Annexure-III.</p>

10	Ambient air quality data shall be collected as per NAAQMSs standard notified by the Ministry on 16 th September, 2009 and trend analysis w.r.t past monitoring results shall also be carried out. Adequate measures based on the trend analysis shall be taken to improve the ambient air quality in the project area.	Ambient air quality data is monitored in line with NAAQS, 2009 in totality. 3 nos. mist cannons, wheel washing system have in installed in NRL and regular water sprinkling along roads within and outside the refinery premises are also carried out to improve ambient air quality.
11	Monitoring of fugitive emission shall be carried out as per the guidelines of CPCB by fugitive emission detectors and reports shall be submitted to the Ministry's regional office at Shillong. For control of fugitive emissions all unsaturated hydrocarbon will be routed to the flare system and the flares system shall be designed for smoke less burning.	Presently being practiced as per the requirement. Regular monitoring of fugitive emission has been carried out using GMI. The GMI survey has been carried on all gas/vapour valves, light liquid valves, hydrogen valves, light liquid pump seals, hydrocarbon compressor seals, hydrogen compressor seals, safety relief valves, flanges, connections, open-ended lines, drains, tankages, and furnaces etc. as per the guidelines. In case of any leak observed, the same is attended immediately in line with the requirement. Hydrocarbons are routed to the flare system and the flare system has been designed for smoke less burning. Fugitive emission data attached as per Annexure V.
12	A proper Leak Detection and Repair (LDAR) Program shall be prepared and implemented. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.	Presently being practiced in line with MoEF notification, 2008.
13	Methyl Iso Butyl Ketone (MIBK) solvent should be handled as per the standard procedure and guidelines issued time to time. MIBK solvents should be stored in cool and dry place, recovered from process through solvent recovery unit and reused in the system.	The system is designed to strictly follow standard procedure & statutory guidelines for handling & storage of MIBK solvent, and is adequate. Also, a highly efficient solvent recovery unit has been implemented to recover and re-use MIBK solvent from foots oil & wax.
14	Total freshwater requirement from River Dhansiri for the proposed unit shall not exceed 60 m ³ /hr. and prior permission shall be obtained from the competent authority. The industrial effluent generation shall not	NRL has already obtained consent from State Government for drawl of max. 1200 m ³ /hr of water. Additional water requirement and treated effluent discharged is maintained within the limits. The

	exceed 5 m ³ /hr. The industrial effluents shall be treated in the ETP and the treated effluent shall meet the prescribed standards. Treated effluents shall be recycled/reused within the factory premises. Domestic sewages shall be treated in sewage treatment plant (STP).	treated effluent quality is maintained within the prescribed standards and about 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup. Domestic sewages are treated in STP and the effluent is routed to refinery ETP.
15	No effluent shall be discharged outside the factory premises and Zero Water Concept shall be adopted.	Treated effluent discharge to outside environment directly from ETP via dedicated pipeline has been discontinued since October'2006 and since April, 2007 township effluent also is being routed to the refinery ETP. Presently there is no dedicated facility for discharging Treated effluent from ETP directly to outside environment. About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints. Treated effluent quality is enclosed as Annexure-IV. Action has been initiated for achieving ZLD for the entire refinery as directed by MoEFCC in the EC amendment of NREP for inclusion of Green Hydrogen Project granted on 09.05.2025.
16	Oil catchers/oil traps shall be provided at all possible locations in rain/storm water drainage system inside the factory premises.	Oil catchers/oil traps are installed in various locations in the storm water channel to avoid any oil carry over to the open channel. Construction of 6 nos additional oil catcher completed. Additionally, NRL has installed a series of hay filters in the storm water channel and oil absorbent booms are used as precautionary measures. Insignificant quantities of emulsified oil generated if any is recovered with the help of MOSRU (Mobile Oil Spill Recovery Unit).
17	Methyl-Iso-Butyl Ketone (MIBK) shall not be allowed to mix with the effluents as well as with storm water and ground water.	Due consideration has been taken in the unit design to avoid MIBK carryover along with effluent. Moreover, a dedicated MIBK close blow-down facility along with recovery system has been

		incorporated to avoid intermixing of MIBK with streams of storm water and ground water thereby preventing contamination.
18	Oily sludge shall be disposed off into coker. Annual oily sludge generation and shall be submitted to the Ministry's Regional Office and CPCB.	<p>NRL produces Anode grade coke which is further processed in Coke Calcination Unit (CCU) to get high value Calcined Petroleum coke (CPC). Trial run for processing of sludge in Delayed Coker Unit (DCU) was carried out on an experimental basis. However, the process led to the deterioration of the CPC quality to a great extent and the experiment had to be called off. Instead, NRL follows a robust sludge handling process for disposal wherein oily sludge from ETP is suitably disposed in Secured Landfill and tank bottom sludge is disposed through bioremediation or is being sold to CPCB authorized recyclers.</p> <p>To waive this condition NRL submitted one application to MoEF, Delhi on 29.01.19.</p> <p>Form-IV Annual return on hazardous waste is being submitted to PCBA regularly and attached as Annexure-E.</p>
19	The Company should strictly comply with the rules and guidelines under Manufacture, and import of Hazardous storage chemical Rules, 1989 as amended in october,1994 and January 2000. Hazardous waste should be disposed of as per Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008 and amended time to time.	The rules and regulations under MSIHC1989 as amended in 2000 and Hazardous waste management rules 2016 are strictly adhered to.
20	The membership of common TSDF should be obtained for the disposal of hazardous waste. Otherwise, secured land fill should be created at the site as per the guidelines of CPCB and obtain authorization from the SPCB. Copy of authorization or membership of TSDF should be submitted to Ministry's Regional office at Shillong.	TSDF installation activities are under progress in Dibrugarh District of Assam and accordingly membership and other required formalities will be taken up in due course for necessary compliance. NRL has also installed an SLF of capacity 6000 m3 as per CPCB guidelines.
21	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum products of and ensure regular monitoring.	The Storm Water Channel from various units are connected and channel through Oil Catchers and also Hay Filters& Oil absorbent booms are installed at various locations. The final outlet of storm water channel is closed immediately in case of any accidental oil carryover and is trapped in the oil catcher for necessary removal.

		<p>The accumulated oil from the oil catchers is lifted with the help of MOSRU (Mobile Oil Spill Recovery Unit).</p> <p>Oily wastewater & contaminated rainwater from various units is routed through OWS (Oily Water Sewer) & CRWS (Contaminated Rain Water Sewer) to ETP for necessary oil removal and treatment in various sections. The slop oil is recovered in ETP and sent to OM&S for needful reprocessing in process units.</p>
22	The company shall strictly follow all the recommendation mentioned in the charter of Corporate Responsibility for Environmental Protection (CREP).	The same is being complied. CREP compliance status has been provided in Annexure-G .
23	The company shall take necessary measures to prevent fire hazards containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	Adequate measures taken up by NRL for prevention of fire hazards. Knockout drums are installed in both the flare systems.
24	To prevent fire and explosion at oil and gas facility, potential ignition sources shall be minimum and kept to a adequate separation distance between potential ignition sources and flammable material shall be in place.	Complied.
25	Green belt shall be developed at least in 33% of the total plant area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around units. Selection of plant species as per the CPCB guidelines	<p>Initially, as per Environmental Clearance granted for the Numaligarh Refinery Project, Ministry of Environment & Forest had stipulated a 500 mtrs wide green belt all around the refinery based on the EIA of Numaligarh Refinery carried out by NEERI.</p> <p>On request from Numaligarh Refinery, the width of the Green Belt was later reduced from the suggested width of 500 mtrs to 100 mtrs because of the reason that almost all the surrounding areas are having tea garden with shade trees (Sirish trees). A wide natural green belt already existed all around the refinery.</p> <p>Accordingly, a Green Belt covering a total area of around 56 hectares of land and around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development</p>

		<p>Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15th October, 2001).</p> <p>Massive Plantation have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. No. of local variety have been planted including some fruit bearing samplings in & all around Green Belt. Again it has been planned to increase the density by planting more saplings in the Green Belt in the days ahead. Initiatives for plantation under Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Dibrugarh (28 Ha.)</p>
26	Company shall prepare project specific environmental manual and a copy should be made available at the project site for the compliance.	Project specific environmental manual prepared and also Submitted to IRO,GHY.
27	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	<p>All recommendations have been implemented.</p> <p>Moreover, Quantitative risk assessment is carried out every 5 years. The Emergency Response and Disaster Management Plan was certified on 28.12.2022 and the certification is valid till 27.12.2025.</p>
28	All the issues raised and committed made during the public hearing/consultation meeting held on 14 th July, 2011 shall be satisfactorily implemented. Accordingly, provision of budget to be kept.	Complied.
29	Company shall adopt Corporate Environment policy as per the Ministry's O M. No. J- 11013/41/2006-IA(I) dated 26 th April, 2011 and implemented.	NRL has already adopted a Env. policy as per the requirement of Environment Management ISO 14001.
30	Provision shall be made for the housing of construction labour within the site with infrastructure and all necessary facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied.

Sl. No.	General Condition	Remarks
1	The project authorities must strictly adhere to the stipulations made by the State pollution Control Board (SPCB) Stale Government and any other statutory authority.	The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to.
2	No further expansion or modification in the project shall be carried out without prior approval from the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance a, fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required if any.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	The project authorities to strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2008 as amended subsequently. Prior approvals from Chief Inspector of Factories Chief Controller of Explosives Fire Safety Inspector must be obtained wherever applicable.	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained.
4	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under PAR ules,1 989v iz.75 dBA (daytime) and 70 dBA (nighttime).	The major sources of noise generation in the proposed project are the pumps and the blowers. Strong foundations provided to mitigate the noise generation further. The equipment being monitored regularly at a distance of 01 mtr from the source and corrective measure being taken to maintain the noise level below 85 dBA. The ambient noise levels all around the refinery is being monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). Noise report for the period has been enclosed as per Annexure I.
5	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management on monitoring functions.	A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a General Manager (Technical) has been continuously working for constant

		<p>improvement, monitoring, safeguarding and reporting of environmental activities of the refinery.</p> <p>Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.</p> <p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to the General Manager (Technical).</p>
6	Adequate funds shall be earmarked towards capital cost and recurring cost/ annum for environment pollution control measures and shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and not diverted for any other purpose. Environmental expenditure Submitted as Annexure-D for the period.
7	The Regional office of this Ministry/Central Pollution Control Board//State Pollution Control Board will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretations shall be submitted to them regularly.	Six monthly compliance report is being sent to the Regional Office of this Ministry/Central Pollution Control board/State Pollution Control Board as per the requirement.
8	A copy of clearance letter shall be sent by the proponent to concerned Panchayat/ Zila Parishad/ Municipal Corporation/ Urban Local Body and the local NGO if any, from whom suggestion/representation if, any,	Copy of the clearance letter sent to concerned Panchayat/ Zila Parishad/ Circle Office.

	were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	
9	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ , NO _x , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied.
10	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The Regional office of this Ministry/ CPCB/ SPCB shall monitor the stipulated conditions	Six monthly report on the status of compliance of environmental conditions along with monitored data is submitted regularly. The same is being displayed in the company's website also.
11	The environmental statement for each financial year ending 31 st March, in form-IV as is mandated to be submitted by the project proponent to the concerned state pollution control board as prescribed under the Environment (Protection) Rules 1986 as amended subsequently shall also be put in the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional offices of the MoEF by e-mail.	Environmental Statement for each financial year ending 31 st March, in form-V is being sent to SPCB every year as per the requirements. The same is being displayed in the company's website also. The environmental statement for the period as per Form-V submitted and attached as Annexure- F.
12	The Project Proponent shall inform the public that the project has been accorded environmental clearance by Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment & Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely	The same has been complied. Advertisement regarding the environmental clearance was published in two local newspapers namely, The Assam Tribune (in English) dated 13.09.2012 and The Amar Axom (Assamese) dated 12.09.2012. Copies of both advertisements were forwarded to the MoEF Regional Office.

	circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same shall be forwarded to the Regional Office.	
13	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied.
14	The Ministry may revoke or suspend the clearance, if implementation of any of the above Conditions is not satisfactory	The same has been noted.
15	The Ministry reserves the right to stipulate additional conditions if found necessary. Company in a time bound manner shall implement these conditions.	The same has been noted.
16	The above conditions will be enforced inter-alia under the provisions of Water (Prevention & Control of pollution) Act 1974, Air (Prevention & control of Pollution) Act' 1981' the Environment (Protection) Act 1986, Hazardous Waste (Management Handling and Transboundary Movement) Rules 2008 and the Public Liability Insurance Act 1991 alongwith their amendments and rules	The same has been noted.

6. Project Name: Naphtha Splitter Unit (160,000 TPA) within the existing 3 MMTPA Refinery

MoEF&CC File No.: J-11011/534/2009-IA. II (I)

EC Issued Date: Sept 12, 2012

Sl. No.	A. Specific Condition	Remarks
1	Compliance to all the environmental conditions stipulated in the environmental clearance letter nos J011011/16/90-IA.II dated 31 st May, 1991, J011011/92/2003-IA.II dated 13 th February, 2004, J011011/272/2008-IA.II (I) dated 10 th November, 2008 shall be satisfactorily implemented and monitoring reports submitted to the Ministry's Regional Office at Shillong.	Half yearly compliance report of all ECs along with monitoring reports are regularly being sent to MoEF.
2	Environmental clearance is subject to their obtaining prior clearance from Wildlife angle due to location of Kaziranga National Park (KNP) nearby including clearance from the Standing Committee of the National Board for Wildlife as applicable.	The matter has been discussed with Chief Wildlife Warden of Assam and Director, Kaziranga National Park. As the proposed project has been constructed within the existing refinery premises, it does not require any additional land. As such, the requirement of approval from wild-life angle is not envisaged. Moreover, Approval from SC-NBWL is required for projects falling within 10 km radius from the boundary of PAs in compliance to Supreme Court's order dated 4th December, 2006 against Writ Petition (Civil) no.460/2004 .Numaligarh Refinery is located at distance more than 10 km radius (22.5 km) from the boundary of Kaziranga National Park- Hence no approval from SC-NBWL is required.
3	No heavy equipments shall be routed through Kaziranga National Park, for which only the route identified earlier shall be used.	Complied.
4	M/s Numaligarh Refinery Limited shall comply with new standards/norms for oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide GSR 186 (E) dated 18 th March, 2008.	NRL is complying with the new standards/norms as per the MoEF notification 2008. The monitoring reports for gaseous emissions and liquid effluent are attached as per Annexure II/III/IV

		<p>Fugitive emission report is also enclosed as Annexure V</p> <p>Compliance status of few other points are as follows:</p> <p>Secondary seals in IFRT and EFRT tanks -installation of double seals in EFRT, IFRT completed.</p> <p>LDAR-programme is implemented.</p> <p>VOC recovery system in ETP has been implemented.</p>
5	Continuous online stack monitoring for SO ₂ and SPM of all the stacks shall be carried out. SO ₂ on-line analysers shall be installed in all the furnace stacks. Low NO _x burners shall be installed with online analysers to monitor NO _x emissions shall be provided.	<p>Low NO_x burners have been provided in all the furnaces.</p> <p>Online stack analysers have been provided in all the major stacks for continuous monitoring of SO₂, NO_x, CO and SPM with real time data transmission to CPCB.</p>
6	The process emissions [SO ₂ , NO _x , HC (Methane & Non-methane)], VOCs and Benzene from various units shall conform to the standards prescribed under the Environment (Protection) Act, 2008. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control systems(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	<p>All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO₂, NO_x, CO & SPM with Real-time emission data has been transmitted to CPCB server on continuous basis. Further, manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. 5 manual ambient air quality monitoring stations and 2 continuous monitoring stations have been installed. Monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office. Monitoring data submitted in Annexure-II/III.</p>
7	Ambient air quality monitoring stations [SPM, SO ₂ , NO _x , H ₂ S, Mercaptan, non-methane-HC, and benzene] shall be set up in the complex in consultation with Assam State Pollution Control Board, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs. Ambient air quality shall also be carried out in one location at Kaziranga National Park for SO _x , NO _x , SPM, CO & HC.	<p>As an action of compliance, five (5) nos. of ambient air quality monitoring stations have been set up at the following locations:</p> <p>SS 1: Inside the refinery (Near WT No.5).</p> <p>SS 2: At the Eco-Park in NRL Township.</p> <p>SS 3: At the Raw Water Intake.</p> <p>SS 4: Near the NH-39 bypass.</p> <p>SS 5: Near the Kaziranga Wildlife Sanctuary at Agartoli.</p> <p>-Ambient Air Quality monitoring at the above locations is being carried out in line with NAAQS-2009 in totality.</p>

		<p>Automatic online stack analysers have been provided in all the major Stacks for continuous monitoring of SO₂, NO_x, CO & SPM. The monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office, Shillong and to the MoEFCC Regional Office, Shillong.</p> <p>NRL has installed one Continuous Ambient Air Monitoring System inside the refinery premises and real-time emission data has been transmitted to the CPCB server continuously. One additional continuous Ambient Air Monitoring System inside the refinery premises as recommended by MoEFCC based on the occurrence of maximum ground level concentration and down-wind direction of wind installed.</p> <p>Monitoring reports for the period is enclosed as Annexure –III</p>
8	Ambient air quality data shall be collected as per NAAQMS notified by the Ministry on 16 th September, 2009 and trend analysis wrt. past monitoring results shall also be carried out. Adequate measures based on the trend analysis shall be taken to improve the ambient air quality in the project area.	<p>Ambient air quality data is monitored in line with NAAQS, 2009 in totality. 3 nos.mist cannons, wheel washing system have in installed in NRL and regular water sprinkling along roads within and outside the refinery premises are also carried out to improve ambient air quality.</p>
9	Monitoring of fugitive emissions shall be carried out as per the guidelines of CPCB by fugitive emission detectors and reports shall be submitted to the Ministry's Regional Office at Shillong. For control of fugitive emissions, all unsaturated hydrocarbon will be routed to the flare system and the flare system shall be designed for smoke less burning.	<p>Presently being practiced as per the requirement. Regular monitoring of fugitive emission has been carried out using GMI. The GMI survey has been carried on all gas/vapour valves, light liquid valves, hydrogen valves, light liquid pump seals, hydrocarbon compressor seals, hydrogen compressor seals, safety relief valves, flanges, connections, open-ended lines, drains, tankages, and furnaces etc. as per the guidelines. In case of any leak observed, the same is attended immediately in line with the requirement.</p> <p>Hydrocarbon are routed to the flare system and the flare system has been designed for smoke less burning.</p> <p>Fugitive emission data attached as per Annexure V.</p>
10	Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall also be	<p>Regular fugitive emission survey is being carried out with the help of GMI as a part of monitoring and control of fugitive emission. The GMI</p>

	provided at strategic locations. The company shall use low Sulphur fuel to minimize SO ₂ emissions. Sulphur recovery units shall be installed for control of H ₂ S emissions. Leak detection and Repair programme shall be implemented to control HC/VOC emissions. Work zone monitoring shall be carried out near the storage tanks besides monitoring of HCs/VOCs in the work zone.	survey is being practiced in all the Process Units, Tankage areas, Marketing Terminal, and other important locations. Gas detectors are also installed at strategic locations. Low sulphur fuels is being used in all the furnaces to minimize SO ₂ emissions. SRU is already installed during the commissioning of the refinery. LDAR programme is implemented. Work environment monitoring in all major areas is carried out.
11	As proposed, record of sulphur balance shall be maintained at the Refinery as a part of the environmental data on regular basis. The basis component of sulphur balance includes sulphur input through feed (sulphur content in crude oil), sulphur output from Refinery through products, byproduct (elemental sulphur), and atmospheric emissions. etc.	The total sulphur emission from the refinery is maintained below 128 kg/hr as Sulphur (256 kg/hr as SO ₂). SO ₂ emission from the refinery is 62.58 kg/hr avg for the period. Regular sulphur balance of the refinery is maintained.
12	The total water requirement shall not exceed 11907 m ³ /day and prior permission shall be obtained from the competent authority. The wastewater shall be treated in the wastewater treatment plant and the treated effluent shall meet the prescribed standards. Treated effluent shall be recycled/reused within the factory premises. Domestic sewage shall be treated in sewage treatment plant (STP).	NRL has already obtained consent from State Government for drawl of max. 1200 m ³ /hr of water. Additional water requirement and treated effluent discharged is maintained within the limits. The treated effluent quality is maintained within the prescribed standards and about 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup. Domestic sewages are treated in STP, and the effluent is routed to refinery ETP.
13	No effluent shall be discharged outside the factory premises and “zero water concept” shall be adopted.	Treated effluent discharge to the outside environment directly from ETP via a dedicated pipeline has been discontinued since October’2006 and since April, 2007 township effluent also is being routed to the refinery ETP. Presently there is no dedicated facility for discharging Treated effluent from ETP directly to outside environment. About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints. Treated effluent quality is enclosed as Annexure-IV.

		Action has been initiated for achieving ZLD for the entire refinery as directed by MoEFCC in the EC amendment of NREP for inclusion of Green Hydrogen Project granted on 09.05.2025.
14	Oil catchers/oil traps shall be provided at all possible locations in rain/storm water drainage system inside the factory premises.	Oil catchers/oil traps are installed in various locations in the stormwater channel to avoid any oil carryover to the open channel. Construction of 6 nos additional oil catcher completed. Additionally, NRL has installed a series of hay filters in the stormwater channel, and oil-absorbent booms are used as precautionary measures. Insignificant quantities of emulsified oil generated if any are recovered with the help of MOSRU (Mobile Oil Spill Recovery Unit).
15	Oily sludge shall be disposed off into Coker. Annual Oily Sludge generation and disposal data shall be submitted to the Ministry's Regional Office and CPCB.	NRL produces Anode grade coke which is further processed in Coke Calcination Unit (CCU) to get high value Calcined Petroleum coke (CPC). Trial run for processing of sludge in Delayed Coker Unit (DCU) was carried out on an experimental basis. However, the process led to the deterioration of the CPC quality to a great extent and the experiment had to be called off. Instead, NRL follows a robust sludge handling process for disposal wherein sludge from ETP is suitably disposed in Secured Landfill and tank bottom sludge generated is disposed through bioremediation or is being sold to CPCB authorized recyclers. To waive this condition NRL submitted one application to MoEF, Delhi on 29.01.19. Form-IV Annual return on hazardous waste is being submitted regularly to PCBA and attached as Annexure-E.
16	The project authorities must strictly comply with the rules and regulation with regard to handling and disposal of Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008 wherever applicable. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage/disposal of hazardous wastes	The rules and regulations under the Hazardous Waste (Management, handling and Trans-boundary Movement) Rules, 2016 are adhered to. Approvals from State Pollution Control Board for authorization (management, handling & disposal) of hazardous waste as per the requirement) has been obtained. In regard to the same, the authorization for Hazardous Waste has been obtained alongwith the

		Consolidated Consent and Authorization (CCA) from PCBA which is valid upto 2029.
17	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum products and ensure regular monitoring.	<p>The Storm Water Channel from various units are connected and channel through Oil Catchers and also Hay Filters& Oil absorbent booms are installed at various locations. The final outlet of storm water channel is closed immediately in case of any accidental oil carryover and is trapped in the oil catcher for necessary removal. The accumulated oil from the oil catchers is lifted with the help of MOSRU (Mobile Oil Spill Recovery Unit).</p> <p>Oily wastewater & contaminated rainwater from various units is routed through OWS (Oily Water Sewer) & CRWS (Contaminated Rain Water Sewer) to ETP for necessary oil removal and treatment in various sections. The slop oil is recovered in ETP and sent to OM&S for needful reprocessing in process units.</p>
18	The company shall strictly follow all the recommendation mentioned on the Charter on corporate Responsibility for Environmental protection (CREP).	Complied. CREP compliance status has been provided in Annexure-G .
19	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	Adequate measures taken up by NRL for prevention of fire hazards. Knockout drums are installed in both the flare systems.
20	To prevent fire and explosion at oil and gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable material shall be in place.	Complied.
21	Green belt shall be developed at least in 33% of the plant area in and around plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines.	<p>Initially, as per Environmental Clearance granted for the Numaligarh Refinery Project, Ministry of Environment & Forest had stipulated a 500 mtrs wide green belt all around the refinery based on the EIA of Numaligarh Refinery carried out by NEERI.</p> <p>On request from Numaligarh Refinery, the width of the Green Belt was later reduced from the suggested width of 500 mtrs to 100 mtrs</p>

		<p>because of the reason that almost all the surrounding areas are having tea garden with shade trees (Sirish trees). A wide natural green belt already existed all around the refinery.</p> <p>Accordingly, a Green Belt covering a total area of around 56 hectares of land and around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15th October, 2001).</p> <p>Massive Plantation have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. No. of local variety have been planted including some fruit bearing samplings in & all around Green Belt. Again it has been planned to increase the density by planting more saplings in the Green Belt in the days ahead. Initiatives for plantation under Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Golaghat (28 Ha.)</p>
22	Company shall prepare project specific environmental manual and a copy shall be made available at the project site for the compliance.	Project specific environmental manual prepared and also submitted to IRO,GHY
23	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	All recommendations have been implemented. Moreover, Quantitative risk assessment is carried out every 5 years. The Emergency Response and Disaster Management Plan was certified on 28.12.2022 and the certification is valid till 27.12.2025.
24	All the issue raised in the public hearing/consultation meeting held on 14 th July, 2011 shall be satisfactorily implemented.	Complied.
25	Company shall adopt Corporate Environment Policy as per the Ministry's O.M No. J-11013/41/2006-IA.II (I) dated 26 th April, 2011 and implemented.	NRL has already adopted a Env. policy as per the requirement of Environment Management ISO 14001.

26	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	Complied.
Sl. No.	General Condition	Remarks
1	The project authorities must strictly adhere to the stipulations by the State Pollution Control Board (SPCB), State Government and any other statutory authority	The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to
2	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	The project authorities must strictly comply with the rules and regulations under Manufacturer, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspector of Factories, Chief Controller of Explosives, Fire Safety Inspectors etc. must be obtained, whenever applicable	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained.
4	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustics hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	The major sources of noise generation in the proposed project are the pumps and the Air coolers. Strong foundations have been provided to mitigate the noise generation further. PPE use is mandatory in high noise areas and the same is ensured. The equipment are monitored regularly and the ambient noise levels all around the refinery is being monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night

		time). Noise monitoring report for the period enclosed as Annexure-I
5	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environment management and monitoring functions.	<p>A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a General Manager (Technical) has been continuously working for constant improvement, monitoring, safeguarding and reporting of environmental activities of the refinery.</p> <p>Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.</p> <p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to the General Manager (Technical).</p>
6	Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment protection control measures and shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and shall not be diverted for any other purpose. Environmental expenditure submitted as Annexure-D for the period.
7	The Regional Office of this Ministry/Central Pollution Control board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data	Six monthly compliance report along with monitoring reports is being sent to the Regional Office of this Ministry/Central Pollution Control Board/State Pollution Control Board as per the requirement.

	along with statistical interpretation shall be submitted to them regularly.	
8	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestion/representation, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Copy of the clearance letter sent to concerned Panchayat/ Zila Parishad/ Circle Office and also available in NRL website.
9	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emission) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	The same is complied.
10	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry/ CPCB/ SPCB/ shall monitor the stipulated conditions.	A six-monthly compliance report on the Environmental Clearance conditions of the Numaligarh Refinery along with the monitoring data is being submitted regularly to the MoE&F Regional Office. The same is being displayed in the company's website also.
11	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986. As amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Environmental Statement for each financial year ending 31st March, in form-V is being sent to SPCB every year as per the requirements. The same is being displayed in the company's website also. The environmental statement for the period as per Form-V submitted and attached as Annexure- F.

12	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same shall be forwarded to the Regional Office.	The same has been complied. Advertisement regarding the environmental clearance for the Naphtha Splitter Unit (NSU) was published in two local newspapers namely, The Assam Tribune (in English) and The Dainik Janambhumi (in Assamese (on the 21 st of September'12 and copies of both the advertisements were forwarded to the MOEF Regional Office, Shillong.
13	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied.

7. Project Name: Installation of new LPG Mounded Bullet and up-gradation of existing LPG Bottling Plant and BS-IV HSD project by adding DHT unit at NRL

MoEF&CC File No.: J-110011/150/2015-IA. II (I)

EC Issued Date: Dec' 9th, 2016

Sl. No.	A. Specific Condition	Remarks
1	NRL shall comply with new standards/norms for Oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide G.S.R. 186(E) dated 18th March, 2008.	NRL is complying with the new standards/norms as per the MoEF notification 2008. The monitoring reports for gaseous emissions and liquid effluent are attached as per Annexure II/III/IV Fugitive emission report is also enclosed as Annexure V. Compliance status of few other points are as follows: Secondary seals in IFRT and EFRT tanks -installation of double seals in EFRT, IFRT completed.

		LDAR-programme is implemented. VOC recovery system in ETP has been implemented.
2	Compliance to all the environmental conditions stipulated in the environmental clearance letter nos. J011011/16/90-1A.II dated 31.05.1991, J011014/2/1991-1A (I) dated 18.01.1994, J011011/92/2003-1A.II (I) dated 13.02.2004, J011011/203/2003-IA. II (I) dated 22.03.2004, J011011/272/2008-IA. II (I) dated 10.11.2008, J011011/113/2009-IA. II (I) dated 05.09.2012, J011011/534/2009-IA. II (I) dated 12.09.2012 shall be satisfactorily implemented and monitoring reports submitted to the Ministry's Regional Office at Shillong.	Half yearly compliance report of all ECs and monitoring reports are regularly being submitted to MoEF, RO.
3	Continuous on-line stack monitoring for SO ₂ , NO _x and CO of all the stacks shall be carried out. Low NO _x burners shall be installed	Low NO _x burners installed in all the stacks. Online SO ₂ , NO _x , CO and SPM analyser installed in all the stacks with realtime data transmission to CPCB server.
4	The process emissions [SO ₂ , NO _x , HC (Methane & Non-methane)], VOCs and Benzene from various units shall conform to the standards prescribed under the Environment (Protection) Act. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency of the pollution control device has been achieved.	All the emissions parameters are monitored on continuous basis and are well within the prescribed limits. Adequate stack heights are provided in all the furnaces. Automatic online stack analysers have been provided in all the major stacks for continuous monitoring of SO ₂ , NO _x , CO & SPM with Real-time emission data has been transmitted to CPCB server on a continuous basis. Further manual stack monitoring is being carried out bi-monthly as per latest MOEF notification. 5 manual ambient air quality monitoring stations and 2 continuous monitoring stations have been installed. Monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office. Monitoring data submitted in Annexure-II/III.
5	Leak Detection and Repair programme shall be prepared and implemented to control HC/VOC emissions. Focus shall be given to prevent fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be	LDAR program implemented. Fugitive emissions survey is conducted in all major locations and monitoring report is also prepared and submitted. Fugitive emission data attached as per Annexure V.

	given. A preventive maintenance schedule for each unit shall be prepared and adhered to. Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall be provided at strategic locations.	Gas detectors for detecting HC leakages have been installed at strategic locations of the refinery.
6	SO2 emissions after expansion from the plant shall not exceed 256 kg/hr and further efforts shall be made for reduction of SO2 load through use of low sulphur fuel. Sulphur recovery unit with tail gas treating facilities having 99.9% efficiency shall be provided.	SO2 emission for this period is 62.58 kg/hr avg. which is well below the allowable limit of 256 kg/hr. SRU with Tail Gas Treating Unit Facilities commissioned.
7	As proposed, record of sulphur balance shall be maintained at the Refinery as part of the environmental data on regular basis. The basic component of sulphur balance include sulphur input through feed (sulphur content in crude oil), sulphur output from Refinery through products, byproduct (elemental sulphur), atmospheric emissions etc.	Regular Sulphur balance for the refinery is carried out and record maintained. Also, overall sulphur balance post DHDT is prepared.
8	Ambient air quality monitoring stations, [PM10, PM2.5, SO2, NOx, H2S, mercaptan, non-methane-HC and Benzene] shall be set up in the complex in consultation with Maharashtra Pollution Control Board, based on occurrence of maximum ground level concentration and down-wind direction of wind	As an action of compliance, five (5) nos. of ambient air quality monitoring stations have been set up at the following locations: SS 1: Inside the refinery (Near WT No.5). SS 2: At the Eco-Park in NRL Township. SS 3: At the Raw Water Intake. SS 4: Near the NH-39 bypass. SS 5: Near the Kaziranga Wildlife Sanctuary at Agoratoli. -Ambient Air Quality monitoring at the above locations is being carried out in line with NAAQS-2009 in totality. Automatic online stack analysers have been provided in all the major Stacks for continuous monitoring of SO2, NOx, CO & SPM. The monitoring reports of emissions are regularly submitted to the PCBA Regional Office, Golaghat and CPCB Regional Office, Shillong and to the MoEFCC Regional Office, Shillong. NRL has installed one Continuous Ambient Air Monitoring System inside the refinery premises and realtime emission data has been

		transmitted to CPCB server on continuous basis. One additional continuous Ambient Air Monitoring System inside the refinery premises as recommended by MoEFCC based on occurrence of maximum ground level concentration and down-wind direction of wind installed. Monitoring reports for the period is enclosed as Annexure –III
9	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	Complied as per CPCB standard.
10	Fresh water requirement from Dhansiri River shall not exceed 688 m3/hr after expansion and prior permission shall be obtained from the competent authority. Industrial effluent generation will be 130 m3/hr and treated in the Effluent Treatment Plant. Treated effluent shall be fully reused/recycled as make-up water for raw water cooling towers.	NRL has already obtained consent from State Government for drawl of max. 1200 m3/hr of water. Additional water requirement and treated effluent discharged is maintained within the limits. The treated effluent quality is maintained within the prescribed standards and about 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup. Permission letter submitted to IRO, GHY.
11	No effluent shall be discharged outside the plant premises and Zero effluent discharge concept shall be followed	Treated effluent discharge to outside environment directly from ETP via dedicated pipeline has been discontinued since October'2006 and since April, 2007 township effluent also is being routed to the refinery ETP. Presently there is no dedicated facility for discharging Treated effluent from ETP directly to outside environment. About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints. Treated effluent quality is enclosed as Annexure-IV. Action has been initiated for achieving ZLD for the entire refinery as directed by MoEFCC in the EC amendment of NREP for inclusion of Green Hydrogen Project granted on 09.05.2025.
12	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MoEF&CC.	Water audit completed. Audit report submitted to IRO, GHY. Action initiated for the conducting comprehensive water audit during FY-25-26.

	Outcome from the report to be implemented for conservation scheme	
13	Automatic/online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB, Regional Office of MoEFCC and in the Company's website.	Flowmeter in the treated effluent line has been installed. For pollutant level measurement pH, TOC (for measurement of COD & BOD), TSS analyzer have been installed and continuous online monitoring systems have also been installed.
14	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	Oil catchers/oil traps are installed in various locations in the storm water channel to avoid any oil carry over to the open channel. Additionally, NRL has installed a series of hay filters in the storm water channel and used oil absorbent booms as precautionary measures. Insignificant quantities of emulsified oil generated if any has been recovered and reused with the help of MOSRU (Mobile Oil Spill Recovery Unit). Construction of 6 nos new oil catcher Near CDU, HCU, OMS north, near ETP, near PH-3, near storm water final O/L completed.
15	Oily sludge shall be disposed off into Coker. Annual Oily sludge generation and disposal data shall be submitted to the Ministry's Regional Office and CPCB.	NRL produces Anode grade coke which is further processed in Coke Calcination Unit (CCU) to get high value Calcined Petroleum coke (CPC). Trial run for processing of sludge in Delayed Coker Unit (DCU) was carried out on an experimental basis. However, the process led to the deterioration of the CPC quality to a great extent and the experiment had to be called off. Instead, NRL follows a robust sludge handling process for disposal wherein oily sludge from ETP is suitably disposed in Secured Landfill and tank bottom sludge is disposed through bioremediation or being sold to CPCB authorized recyclers. To waive this condition NRL submitted one application to MoEF, Delhi on 29.01.19. Form-IV Annual return on hazardous waste is being regularly submitted to PCBA and attached as Annexure -E
16	The Company should strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and	The rules and regulations under MSIHC1989 as amended in 2000 and Hazardous waste management rules 2016 are adhered to. The authorization for Hazardous Waste has been obtained along with the

	January, 2000. Hazardous waste should be disposed of as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and amended time to time	Consolidated Consent and Authorization (CCA) from PCBA which is valid upto 2029.
17	The membership of common TSDF should be obtained for the disposal of hazardous waste. Copy of authorization or membership of TSDF should be submitted to Ministry's Regional Office at Shillong. Chemical/inorganic sludge shall be sent to treatment storage disposal facility (TSDF) for hazardous waste. Spent catalyst shall be sent to authorized recyclers/re-processors.	TSDF installation activities are under progress in Dibrugarh District of Assam and accordingly membership and other required formalities will be taken up in due course for necessary compliance. NRL also has its own SLF of capacity 6000 m3 for a safe and systematic disposal of hazardous materials as per CPCB recommendation. Spent catalyst generated is disposed of through authorized recyclers.
18	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum products and ensure regular monitoring	The Storm Water Channel from various units are connected and channel through Oil Catchers and also Hay Filters& Oil absorbent booms are installed at various locations. The final outlet of storm water channel is closed immediately in case of any accidental oil carryover and is trapped in the oil catcher for necessary removal. The accumulated oil from the oil catchers is lifted with the help of MOSRU (Mobile Oil Spill Recovery Unit). Oily wastewater & contaminated rainwater from various units is routed through OWS (Oily Water Sewer) & CRWS (Contaminated Rain Water Sewer) to ETP for necessary oil removal and treatment in various sections. The slop oil is recovered in ETP and sent to OM&S for needful reprocessing in process units.
19	Acoustic enclosure /silencer shall be installed wherever it is possible	Complied
20	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act	Health checkup of workers is carried out and records are maintained on a regular basis.
21	The company should make the arrangement for protection of possible fire and explosion hazards during construction and operation phase.	Complied.

22	The company shall strictly follow all the recommendation mentioned in the charter of Corporate Responsibility for Environmental Protection (CREP).	Complied. CREP compliance status has been provided in Annexure-G .
23	Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines	<p>Initially, as per Environmental Clearance granted for the Numaligarh Refinery Project, Ministry of Environment & Forest had stipulated a 500 mtrs wide green belt all around the refinery based on the EIA of Numaligarh Refinery carried out by NEERI.</p> <p>On request from Numaligarh Refinery, the width of the Green Belt was later reduced from the suggested width of 500 mtrs to 100 mtrs because of the reason that almost all the surrounding areas are having tea garden with shade trees (Sirish trees). A wide natural green belt already existed all around the refinery.</p> <p>Accordingly, a Green Belt covering a total area of around 56 hectares of land and around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15th October, 2001).</p> <p>Massive Plantation have been carried out in the Green Belt so that it can provide a natural barrier for attenuation of noise and air pollution. No. of local variety have been planted including some fruit bearing samplings in & all around Green Belt. Again it has been planned to increase the density by planting more saplings in the Green Belt in the days ahead. Initiatives for plantation under Compensatory Afforestation drive in degraded areas has been taken up at Nakkati Chapori, Golaghat (40 Ha), Kandoli Reserve Forest, Nagaon (35 Ha) and Abhoypur village, Dibrugarh (28 Ha.)</p>
24	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	The same has been noted & being implemented.

		Moreover, Quantitative Risk Assessment is being carried out every 5 years. The Emergency Response and Disaster Management Plan was certified on 28.12.2022 and the certification is valid till 27.12.2025.
25	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and an action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Shillong. Implementation of such a program shall be ensured accordingly in a time-bound manner. Detailed action plan to be submitted to MOEFCC Regional Office, Shillong.	Comprehensive plan prepared. Action plan with financial and physical breakup/details with time line submitted to IRO,GHY.
Sl. No.	General Condition	Remarks
1	The project authorities must strictly adhere to the stipulations made by the State pollution Control Board (SPCB) Stale Government and any other statutory authority	The stipulations made by the Pollution Control Board of Assam and the State Government are strictly adhered to.
2	No further expansion or modification in the project shall be carried out without prior approval from the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance a, fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required if any.	Any expansion or modernization in the plant will be taken up only with prior approval of the Ministry of Environment & Forests.
3	The project authorities to strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2008 as amended subsequently. Prior approvals from Chief Inspector of Factories Chief Controller of Explosives Fire Safety Inspector must be obtained wherever applicable	The rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and as amended in 2000 are adhered to. Approvals from Chief Inspectorate of Factories, Chief Controller of Explosives etc as applicable for the Numaligarh Refinery have been obtained.
4	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control	The major sources of noise generation in the proposed project are the pumps and the blowers. Strong foundations shall be provided to mitigate

	measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under PAR ules,1 989v iz.75 dBA(day time) and 70 dBA (nighttime).	the noise generation further. The equipment shall be monitored regularly at a distance of 01 mtr from the source and corrective measure shall be taken to maintain the noise level below 85 dBA. The ambient noise levels all around the refinery is being monitored regularly so as to maintain within the standards, prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time). Noise report for the period attached as per Annexure I.
5	A separate Environmental Management Cell equipped with full fledged laboratory facilities must be setup to carry out the environmental management on monitoring functions	<p>A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a General Manager (Technical) has been continuously working for constant improvement, monitoring, safeguarding and reporting of environmental activities of the refinery.</p> <p>Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.</p> <p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to the General Manager (Technical).</p>
6	Adequate funds shall be earmarked towards capital cost and recurring cost/ annum for environment pollution control measures and shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule	Adequate funds have been provided for implementing the conditions stipulated by MoEF and the State Govt. and shall not be diverted for any other purpose. Environmental expenditure Submitted as Annexure-D for the period.

	for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	
7	The Regional office of this Ministry/Central Pollution Control Board//State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretations shall be submitted to them regularly.	Six monthly compliance report along with monitored data is being sent to the Regional Office of this Ministry/Central Pollution Control board/State Pollution Control Board as per the requirement.
8	A copy of clearance letter shall be sent by the proponent to concerned Panchayat/ Zila Parishad/ Municipal Corporation/ Urban Local Body and the local NGO if any, from whom suggestion/representation if, any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Copy of the clearance letter sent to concerned Panchayat/ Zila Parishad/ Circle Office.
9	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ , NO _x , HC (Methane& Non- methane),VOCs (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Six monthly compliance report along with monitored data is being sent regularly to the Regional Office of this Ministry/Central Pollution Control board/State Pollution Control Board as per the requirement. The same is also displayed in NRL website. The critical pollutant parameters are also displayed near the Refinery Main gate.
10	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry/ CPCB/ SPCB/ shall monitor the stipulated conditions	A six-monthly compliance report on the Environmental Clearance conditions of the Numaligarh Refinery along with the monitored data is being submitted regularly to the MoEFCC Regional Office. The same is being displayed in the company's website also.

11	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986. As amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Environmental Statement for each financial year ending 31st March, in form-V is being sent to SPCB every year as per the requirements. The same is being displayed in the company's website also. The environmental statement for the period as per Form-V submitted and attached as Annexure-F.
12	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locally concerned and a copy of the same shall be forwarded to the Regional Office.	Advertisement regarding the environmental clearance for the DHDT Unit was published in two local newspapers namely, The Assam Tribune (in English) and The Dainik Janambhumi (in Assamese (on the 26 th December, 2016 of both the advertisements were forwarded to the MOEF Regional Office, Shillong.
13	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Project commissioned in March,2018.
14	The Ministry may revoke or suspend the clearance, if implementation of any of the above Conditions is not satisfactory.	The same has been noted.
15	The Ministry reserves the right to stipulate additional conditions if found necessary. Company in a time bound manner shall implement these conditions.	The same has been noted.
16	The above conditions will be enforced inter-alia under the provisions of Water (Prevention & Control of pollution) Act 1974, Air (Prevention & control of Pollution) Act' 1981' the	The same has been noted.

Environment (Protection) Act 1986, Hazardous Waste (Management Handling and Transboundary Movement) Rules 2008 and the Public Liability Insurance Act 1991 alongwith their amendments and rules.	
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8. Project Name: Expansion of the Refinery from 3 MMTPA to 9 MMTPA

MoEF&CC File No.: J-11011/274/2015 –IA II (I)

EC Issued Date: July 27th, 2020

i. 1st amendment: MoEF&CC File No.: J-11011/274/2015 –IA II (I) dated 06.05.2021

ii. 2nd amendment: MoEFCC File No.: J-11011/274/2015-IA II(I) dated 09.05.2025

Sl No	Conditions	Compliance status
13(i)	The EC granted to the project/ activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount / construe to approvals/ consent/ permissions etc. required to be obtained or standards/ conditions to be followed under any other acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project.	Noted.
13(ii)	The effluent shall be treated and recycled/ reused to meet the requirement of different industrial operations and Zero Liquid Discharge shall be achieved. The treated effluent of 300 cum/hr, if discharged to Dhansiri river through pipeline (to downstream	A Zero Liquid Discharge techno-economic feasibility study has been carried out through M/s EIL. The feasibility report with recommendations submitted to MoEF, Delhi on 02.11. As advised by MoEFCC NRL applied online for EC

	<p>only), shall conform to the standards prescribed under the Environment (protection) Rules, 1986. If Zero Liquid Discharge is not followed, the Project Proponent shall submit plan for achieving Zero Liquid Discharge with its techno-economic feasibility within 3 months before the EAC/Ministry.</p> <ul style="list-style-type: none"> 1st Amendment: The effluent shall be treated and recycled/ reused to meet the requirement of different industrial operations. The RO-DM reject of 300 m3/hr to be discharged to Dhansiri River through pipeline (to downstream only), shall conform to the CPCB guidelines. 2nd Amendment: PP shall achieve ZLD within the entire industry within 42 months and no treated effluent or RO/D.M. rejects shall be discharged into Dhansiri River. 	<p>amendment on 04.03.2021. The proposal was appraised by EAC committee(I-2) in the ministry in its meeting held on 18th March'2021. The EAC after deliberations, recommended the amendment in EC as proposed by NRL. Based on the recommendation MoEF accorded approval to the proposed amendment on 06.05.2021.</p> <p>However, during the proceedings for the EC amendment of NREP for inclusion of Green Hydrogen additional condition of achieving ZLD for the entire industry within 42 months was directed. Accordingly, action has been initiated for achieving ZLD for the entire refinery as directed by MoEFCC.</p>
13(iii)	The project proponent shall finalize and submit the details of sites to be utilized for associated activities of the refinery in the NDZ area within six months. Preference shall be given to the sites which is adjoining / adjacent to the refinery area. The project proponent shall submit MoU/commitment from the stakeholders regarding transfer of the land.	Land documents submitted to MoEFCC on 28.06.2022.
13(iv)	The National Emission Standards for Petroleum Oil refinery issued by the Ministry vide G.S.R. 186 (E) dated 18 th March, 2008 and G.S.R. 595(E) dated 21 st August, 2009 as amended from time to time, shall be followed.	Noted for compliance.
13(v)	Volatile organic compounds (VOCs)/ Fugitive emissions shall be controlled at 99.997% with effective chillers/ modern technology. For emission control and management, use of FG/NG in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed / ensured.	<p>Noted for compliance.</p> <p>FG/NG will be used as fuel in the furnaces. CEMs are being provided in the stacks for CDU /VDU heaters, DHT heaters, SRB Stack and Boiler stacks.</p> <p>Sulphur recovery plant is being installed as a part of NREP.</p>

13(vi)	Total fresh water requirement after expansion shall not exceed 2508 cum/hr to be met from Dhansiri river. Fresh water requirement shall be reduced by recycling/reuse of water. Necessary permission for freshwater procurement shall be obtained from the concerned regulatory authority.	Permission obtained from State Irrigation Dept. Approval letter for drawl of water from River Dhansiri on 21.07.1995 and 02.05.2019 submitted to IRO,GHY
13(vii)	Process effluent/ any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Noted. Process effluents shall not be directly mixed with storm water. Process effluent/wastewater will be treated in dedicated treatment chains in Effluent treatment plant of NREP.
13(viii)	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrested shall be provided on tank farm, and solvent transfer to be done through pumps.	The hazardous chemicals will be stored in tanks , tank farms , drums, and flare arrester provided as applicable based on fluid properties. Solvent transfer will be done through pumps.
13(ix)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Noted for compliance.
13(x)	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers / cement industry.	The refinery complex of NRL does not have solid fuel (coal, coke, biomass etc.) fired heaters or boilers. As such, there is no fly ash generation from the NRL refinery complex. Hence, selling back ash from boiler to brick manufacturer/cement industry does not arise.
13(xi)	The company shall undertake waste minimization measures as below:- a) Metering and control of quantities of active ingredients to minimize waste. b) Reuse if by-products from the process as raw materials or as raw material substitutes in other processes.	Measures for waste minimization have been undertaken. a) All quantities of active ingredients are metered/quantified and closely monitored to minimize wastage and optimized accordingly. b) Reuse of by-products as a raw material in downstream process plants considered as applicable. c) Level sensors/indicators are provided in tanks to minimize

	<ul style="list-style-type: none"> c) Use of automated filling to minimize spillage. d) Use of Close Feed system in to batch reactors. e) Venting equipment through vapour system f) Use of high pressure hoses for equipment cleaning to reduce waste water generation. 	<p>spillage and optimize usage. d) All feed systems in reactors are designed with close loop as applicable. e) It is a design feature across NREP and already considered to all the vents of spheres, flares, etc. f) High pressure hoses are used for cleaning purpose which saves water and reduce wastewater generation also.</p>
13(xii)	<p>The green belt of 5-10m width shall be developed in the total project area, mainly along the plant periphery, in downwards wind direction, and along road sides etc. The project proponent shall ensure 40% greenbelt area vis-à-vis the project area through afforestation in the degraded area. The selection of plant species shall be as per the CPCB guidelines in consultant with the State Forest Department.</p>	<p>An MoU was signed on 14.09.2020 between NRL and Golaghat Social Forestry Division, Govt. of Assam for compensatory afforestation of 40 Hectares of land in Nakkati Chapori, Khumtai Revenue Circle, Golaghat for plantation of 1 lakh tree saplings.</p> <p>Another MoU was signed between NRL and Nagaon Forest Division for Compensatory afforestation drive in 35 Ha land in Kandoli PRF on 23.08.2021 for plantation of 65000 saplings.</p> <p>MOU has been also signed with Dibrugarh Forest Division on 29.05.2024 for compensatory afforestation in 28 Ha. land area for plantation on 3,50,000 saplings.</p>
13(xiii)	<p>As proposed, at least Rs. 36.51 crore shall be allocated towards Corporate Environment Responsibility (CER). As proposed, the CER allocation shall be spent mainly for addressing the issue raised during public consultation/ hearing including assistance/ infrastructure for transport facility, drinking water, social/ environmental activities, education & skill development, etc.</p>	<p>CER model prepared.</p> <p>CER report for the period has been attached as per Annexure C.</p>
13(xiv)	<p>For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.</p>	<p>Noted for compliance.</p> <p>The stack height confirms to regulations and CPCB guidelines.</p>

13(xv)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	The firefighting methods were designed based on hazardous nature of the materials being handled, the facility of Fire-fighting design is as per OISD 116 and other relevant standards as applicable.
13(xvi)	Continuous online (24X7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB serve. For online continues monitoring of effluent, the unit shall installed web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	Noted for compliance. Monitoring data shall be submitted after project completion and commissioning of new 6 MMTPA refinery train. Existing data for 3 MMTPA being submitted regularly with half yearly EC compliance status. Monitoring reports attached as per Annexure II, III, IV.
13(xvii)	Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.	Quantitative Risk Assessment study is carried out every 5 years. Latest QRA for existing refinery and NREP has been conducted in 2021.
13(xviii)	The project proponent shall implement the Site-Specific Conservation Plan for conservation of Schedule I Species in the study area and obtain approval from the State Chief Wildlife Warden of the Department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Wildlife Department. The implementation report shall be furnished along with the six-monthly compliance report.	Noted for compliance. Site specific conservation plan for Schedule I species as per EIA report for NREP, submitted to Principal Chief Conservator of Forests (PCCF), Assam for approval.
13(xix)	The PP should improved the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24X7 hours monitoring system (of the discharge) and the same should be connected to the server of SPCB/CPCB.	Noted for compliance.

13(xx)	Fly Ash Brick making plant shall be installed for proper disposal of fly ash.	As clarified above (reply to 13x), as NRL does not generate fly ash. Hence, installing fly ash brick making plant does not arise.
General Conditions		
13.1(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted for compliance.
13.1 (ii)	The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.	Noted for compliance.
13.1 (iii)	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board) SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Noted for compliance. New CAAQMS location has been finalized in consultation with SPCB.
13.1 (iv)	The National Ambient Air Quality Emission Standards issued by the Ministry vide GSR No. 826(E) dated 16 th November, 2009 shall be followed.	Noted for compliance.
13.1 (v)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall	Noted for compliance.

	conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz 75dBA (day time) and 70 DBA (night time).	
13.1 (vi)	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.	Roof top rainwater harvesting from a major building having huge potential is being planned and action has been initiated for the same.
13.1 vii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre- employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Noted for compliance.
13.1(viii)	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental managements, and risk mitigation measures relating to the project shall be implemented.	Noted for compliance.
13.1 (ix)	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.	CER model prepared. CER activity report for the period enclosed as per Annexure C.
13.1 (x)	The company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment.	Noted for compliance.
13.1 (xi)	A separate Environmental Management Cell having qualified person with Environmental Science/ Environmental Engineering / specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	A fully functional, dedicated environment management cell manned by qualified engineers/officers and headed by a Chief General Manager (Technical) has been continuously working for constant improvement, monitoring, safeguarding and reporting of environmental activities of the refinery.

		<p>Also, as advised by MoEFCC, 18 Nodal officers from various sections of the refinery have been appointed in May'2024 for compliances of Environment related issues.</p> <p>Also, a multidisciplinary Apex-level Committee on Environment which includes senior level officers from various departments as members under the chairmanship of Director (Technical) constantly guides the Environment Cell regarding all the environmental issues in the refinery. The Apex Committee that convenes quarterly discusses the unresolved issues if any and monitors the regular environmental activities.</p> <p>The laboratory facility had been set up for collection and analysis of samples under the supervision of competent personnel, reporting to the Deputy General Manager (QC) and who reports to the General Manager (Technical).</p>
13.1 (xii)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so diverted for any other purpose.	Noted for compliance.
13.1(xiii)	A copy of the clearance letter shall be sent by the project proponent to concern Panchayat, Zilla Parishad/ Municipal Corporation, urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Copy of clearance letter submitted to Letekujan Gaon Panchayat, Rongbong Gaon Panchyat, Ponka Gaon Panchyat, Morongi Circle Office on 19.08.2020. Copy submitted to IRO,GHY
13.1(xiv)	The project proponent shall also submit six monthly report on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored date (both in hard copies we well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB	<p>-Noted for compliance.</p> <p>Half yearly EC conditions compliance status is being submitted regularly and also available in NRL website.</p>

	and SPCB. A copy of Environmental Clearance and six Monthly compliance status report shall be posted on the website of the company.	
13.1 (xv)	The environmental statement for each financial year ending 31 st March in form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	-Noted for compliance. Environmental Statement for each financial year ending 31 st March, in form-V is being sent to SPCB every year as per the requirements. The same is being displayed in the company's website also. The environmental statement for the period as per Form-V submitted and attached as Annexure-F
13.1(xvi)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/ . this shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which on shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	The advertisement of granting of EC grant broadly published in widely circulated local newspapers - Amar Asom, Pratidin, Dainik Asom, Asomia Khobor, Dainik Agradoot, Dainik Janambhumi, Niyamia Barta (Assamese) and The Assam Tribune and The Sentinel (English) on 30 th July, 2020 for information to public. The copy of EC letter and paper advertisement sent to MoEF,RO on 06.08.2020
13.1(xvii)	The project authorities shall inform the Regional Office as well as the Ministry, the date of Financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Noted for compliance
13.1(xviii)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India. Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted

8. ii. **Project Name: Expansion of Numaligarh Refinery from 3 MMTPA to 9 MMTPA at village Pankagrath, District Golaghat, Assam & permission in ‘No Development Zone’ for inclusion of 2.4 KTPA Green Hydrogen Generation Unit by M/s Numaligarh Refinery Limited (NRL) – Consideration for Amendment in Environmental Clearance.**

MoEF&CC File No.: J-11011/274/2015 –IA II (I)

EC Issued Date: 09th May, 2025

Sl. No.	Additional EC Conditions	Remarks
1.	PP shall achieve ZLD within the entire industry within 42 months and no treated effluent or RO/D.M. rejects shall be discharged into Dhansiri River.	Noted for compliance. Action has been initiated.
2.	PP Electrolyzer imported shall be complied with the environmental standards and norms laid down in India.	Noted for compliance.

9. Project Name: Proposed Polypropylene Project (PPU) of Capacity 360 KTPA

MoEF&CC File No.: J-11011/274/2015-IA-II(I)

EC Issued Date: August 1st, 2024

Sl. No.	Specific EC Conditions	Remarks
1.1	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented (Annexure - 3).	Noted.
1.2	Total freshwater requirement shall not exceed 5040 KLD, proposed to be met from NREP Treated water header for which water is sourced from river Dhansiri. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	Noted.
1.3	The entire wastewater generated by the PPU unit shall be treated in the ETP installed at NREP. The entire treated water shall be taken back and recycled and reused in the PPU, thereby reducing the freshwater requirement to that extent.	Noted.
1.4	The freshwater requirement shall be reduced after the installation of a rainwater harvesting system in the unit/project area. Comprehensive water audit to be conducted on an annual basis and report to the concerned Regional Office of MEF&CC. The outcome from the report to be implemented for conservation scheme.	Noted.

1.5	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond	Noted.
1.6	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Noted.
1.7	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.	Noted.
1.8	The unit shall install 03 continuous monitoring stations considering the wind rose (meteorological conditions) and in consultation with Assam SPCB for monitoring of PM10, PM2.5, SO2, NOx, O3, VOC's, THC and NMHC. Sensors shall be installed for monitoring of VOCs, THC's and NMHC's at all storage tanks, transfer and vulnerable points.	Noted.
1.9	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bioremediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system. The leachate collected shall be treated to meet the norms specified under E(P) Act, 1986.	Noted.
1.10	Oil catchers/oil traps shall be provided at all possible locations in the rain/stormwater drainage system inside the factory premises.	Noted.
1.11	The company shall undertake waste minimization measures as below: a) Metering and control of quantities of active ingredients to minimize waste. b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. c) Use of automated filling to minimize spillage.	Noted.

	<p>d) Use of Close Feed system into batch reactors.</p> <p>e) Venting equipment through vapour recovery system.</p> <p>f) Use of high-pressure hoses for equipment cleaning etc. to reduce wastewater generation.</p>	
1.12	<p>Greenbelt of at least 10m width shall be developed in 11.52 hectares i.e., 33.1 % of total project area with tree density @ 2500 trees per hectare, all along the plant periphery. Indigenous aromatic plants species to control the odour shall only be planted for greenbelt development and and only native species shall be developed. Non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 varieties of species as a part of the greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines, in consultation with CBRI Lucknow and the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Greenbelt development shall be completed before the commissioning of the plant. Trees shall be planted in the Green Belt under the campaign #Plant4Mother #एक पेड़ माँ के नाम and uploaded on the MeriLiFE portal (https://merilife.nic.in/).</p>	Noted.
1.13	<p>PPU plant of NREP shall initiate the following measures to control fugitive emissions:</p> <p>(a) Install Trolley mounted Fog/Mist generators within the unit.</p> <p>(b) Install Automatic sensor-based Wheel washing system for vehicles exiting the refinery.</p> <p>(c) Sprinkling water along the haul roads within the refinery and also on the roads outside the plant premises.</p> <p>(d) Develop green belt along the plant roads within the plant premises and on outside roads joining the plant at least up to 0.50 km to control fugitive dust emissions.</p>	Noted.

	(e) Procure Mechanised Industrial Vacuum cleaners for regular cleaning of plant roads.	
1.14	PP shall sign power purchase agreement with renewable energy producer(s) to meet 10% of its power requirement from renewable energy sources.	Noted.
1.15	PP proposed to allocate Rs. 15.00 Crores towards CER to address issues raised in the Public Hearing conducted on 04.12.2023 which shall be spent as submitted in the CER plan. The action plan shall be completed within the timeline proposed (Annexures - 4 & 5).	Noted.
1.16	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Noted.
1.17	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	Noted.
1.18	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	Noted.
1.19	PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	Noted.
1.20	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated	Noted.

	9th November 2012 as amended from time to time shall be followed.	
1.21	Recommendations of mitigation measures from possible accidents shall be implemented based on Risk Assessment studies conducted for worst-case scenarios using latest techniques.	Noted.
1.22	The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.	Noted.
1.23	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of the Notification published by MOEFCC on 12th August 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to the concerned authority.	Noted.
1.24	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. The firefighting system shall be as per the norms. PESO certificate shall be obtained. Location of storage tanks of flammable substances shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such an event should not go beyond the boundary of the plant i.e. the risk should be tolerable (acceptable) at the boundary.	Noted.
1.25	Company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the location of the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended.	Noted.

	Accordingly, a Risk Mitigation plan shall be in place and tested using the 3D CFD modelling.	
1.26	Company shall determine the distance of fire hydrant while finalizing its location from storage tanks of flammable substances or any other hazardous storage substance shall be based on the dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.	Noted.
1.27	Specific arrangements shall be made for the prevention of leakage of Hydrogen and its safety	Noted.
1.28	The permission is restricted to the proposed Poly Propylene Unit of 360 KTPA capacity located within the jurisdiction of Numaligarh “No Development Zone” only and any change in this require prior approval of the Ministry. Further, any other activities outside the scope of work of this proposal shall not be allowed.	Noted.
General Conditions		
Sl. No.	EC Conditions	Compliance status
2.1	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted.
2.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Noted.

2.3	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noted
2.4	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Noted
2.5	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted
2.6	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Copy of clearance letter submitted to DC, Golaghat, DIC, Golaghat, Chief Zila Parishad, Golaghat, Divisional Forest Officer, Golaghat, Morongi Circle Office, Ponka Gaon Panchayat, on 12.08.2024.
2.7	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and	Noted.

	SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company	
2.8	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Noted.
2.9	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/ . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	The advertisement of granting of EC has been broadly published in widely circulated local newspapers – Asomiya Pratidin (Assamese) and The Assam Tribune on 7 th August 2024 for information to the public. The copy of the EC letter and paper advertisement was sent to MoEFCC, IRO on 07.08.2024.
2.10	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Noted.
2.11	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.

Annexure-A

COMPLIANCE STATUS OF THE SIX CONDITIONS GIVEN WITH THE DEVELOPMENT OF TOWNSHIP OBTAINED VIDE LETTER NO. J-11014/2/91-IA.II DATED 18TH JANUARY, 1994 FROM MOEF NEW DELHI.

CONDITIONS:

i) The hill slopes should not be used for civil construction purposes

- Noted.

ii) Land use planning of the colony and the land around it should be finalized in construction with the State Town Planning Department.

- Consultation was done, but minutes of the same are not available at present.

iii) More open space should be left and the building construction may be done by acquiring minimum land and the houses should be constructed on ground plus two floors basis.

- Noted.

Open space left within the township is around 82% of the total area.

iv) Township site should not involve any forest area.

- Township is constructed only in the permitted area.

v) The existing forest cover towards the west and north of the proposed colony site should not be disturbed.

- It is not disturbed.

vi) No organized human settlement or private colonies should be allowed in the hill or the areas adjoining the hill. (Atleast in a radius of 10 kms).

- The Govt. of Assam has already notified the “No Development Zone” on 19.01.95.

***POINT-WISE STATUS OF CONDITIONS MENTIONED IN THE
“NO OBJECTION CERTIFICATE” VIDE NO. WB/T-843/89-90/154
DATED 01.09.1990
OF
POLLUTION CONTROL BOARD, ASSAM***

- 1. No Air, Water, Soil pollution shall be created by the industry beyond the permissible limits prescribed by this Board. The industry would incorporate adequate pollution control measures before they put the plant into operation.**

- This has been complied. For abatement of pollution, the following environment initiatives have been incorporated:

- Effluent Treatment Plant with tertiary treatment facilities. This is further enhanced by implantation of ETP modernization and VOC recovery system in ETP. .*
- Sulphur Recovery Block*
- Ambient Air Quality monitoring*
- Automatic online stack monitoring system*
- Green Belt around refinery and NRMT*
- Non-illuminating ground flare*
- Low NOx burners incorporated in design*
- Township sewage treatment plant and composting plant*
- Hazardous oily waste and other solid waste management by Secured Landfill Facility, Bio-remediation and selling to approved recyclers.*

- 2. To maintain the environmental and ecology in the area provision for planting selected species of these within the compound and approaches along with provisions for park, garden and fountain shall have to be made. Massive afforestation will have to be made by the industry in the factory and township.**

-Within the refinery premises, few gardens have been developed near various units like Hydrocracker(HCU), Captive Power Plant (CPP), Effluent Treatment Plant (ETP), QC lab, Central Control Room (CCR) etc. Plantation of different variety of saplings have been widely carried out mainly along the all roadside areas all throughout the refinery. Fountain has been made in front of the Administrative Building. Massive plantations have been also carried out on all along the road sides in the Township and plantation also have been done in wide scale in the Butterfly Valley, Herbal garden, public places and club premises and few other places in the Township.

3. **As per provisions of water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 any officer empowered, by this Board in its behalf shall without any interruption, the right at any time to enter the industry for inspection, to take samples for analysis and may call for any information etc. Violation of this right will be withdrawal of the “NO OBJECTION CERTIFICATE”.**

-This has been followed without any exception.

4. **As per provisions of the Acts, regular monitoring are to be done by the industry from the locations/points fixed by this Board and the reports to be submitted to the Board timely as prescribed.**

- Regular monitoring of air pollution and effluent quality has been carried out and results are submitted to the PCBA Regional office, Golaghat in every month.

5. **Effluent carrying drains must be segregated from storm water drains and effluent must be disposed in effluent pond. In no case, effluent will be discharged into nearby nullah / natural watercourse etc. without treatment and bringing it within ISI permissible limits or limits fixed by the Board.**

-Effluent collection and segregation philosophy was submitted to PCBA. Discharge of any effluent ex-refinery into the River Dhansiri has been stopped since October, 2006.

6. **Standard linings and flat embankment of effluent pond shall have to be provided in the pond to prevent and control of overflow, seepage and leakage of effluent to the nearby areas.**

-This was incorporated in the design of the storage ponds of the Effluent Treatment Plant and constructed accordingly.

7. **To regularise the subsequent process, the legal provisions of CONSENT LICENCE and RETURNS shall have to be timely adhered to.**

-Submission of application for revalidation of Consent from PCB, Assam for running of the various units and Returns are being timely adhered to.

8. **Gaseous pollutants due to the burning of the fuel to run engine, boiler, etc. should be controlled by adopting preventive measures.**

-Low NOx burners have been installed in all the furnaces and also, low sulfur fuels are being used.

- 9. Solid waste that arises during the operation should be properly graded and disposed off scientifically without causing nuisance.**
-Solid waste has been properly graded, hazardous oily waste and other solid waste disposed off through the Secured Land Fill facility and bio-remediation after taking due authorization from PCBA. Spent catalyst is disposed off through approved recyclers and few quantity of oily sludge has been sold to approve recyclers.
- 10. For low-lying areas, special care is to be taken by the Industry to prevent any overflow, seepage and leakage of the effluent.**
-Does not arise.
Presently no effluent is discharged from the refinery and township into the River Dhansiri or any water Body.
- 11. For warning systems (Alarm, Siren) is to be installed by the Industry to guard against accidental pollution/mishap together with fire fighting devices.**
-Sirens have been installed at the refinery site and Township to alert workers on emergency and a complete fire fighting network has been installed. Fire tenders are readily available at site and in operation.
- 12. All pipes connections, joints, fittings etc in the factory and plant are to be frequently checked and leak proof all the time by the industry.**
-These are being physically checked on regular basis and in case of any leakage corrective action is taken at the earliest. However, for the detection of very minor gas/vapour leak - fugitive emission monitoring is done on regular basis by using Gas Measuring Instrument and rectified the leaking points on priority. In additions, acoustic survey is also carried out in various units in regular intervals.
- 13. Proper house keeping and adequate maintenance has to be ensured/enforced as per provisions of the Acts.**
- This is complied.
- 14. All unwanted/toxic chemicals/fluid/gases are to be neutralized and flared up as necessary.**
-The point is adhered to without any deviation.
- 15. Production process is to be monitored and in the event of danger, immediate shutdown is to be ensured by the Industry.**

-Production process is continuously being monitored from the Control Room and applicable step is initiated as per requirement.

- 16. Provisional “NO OBJECTION CERTIFICATE” will be valid till the proposed date of commissioning of the plant.**

-Noted

- 17. The provisional “NO OBJECTION CERTIFICATE” has been issued being on the particulars furnished by the applicant and subject to imposition of further/more conditions if warranted by the subsequent development.**

-Noted

- 18. Healthy working environment for the workers must be maintained and there should not be health hazard to the workers for inadequate arrangements for ventilation, dust removal etc. Arrangements should be adequate and full proof for the health of the workers. Their health should be regularly monitored.**

- NRL follows OISD – GDN – 166 Guideline for Occupational Health Hazard monitoring to provide specific level of occupational health & hygiene services to the employees and necessary health care.

This includes:

- a) Work Environment monitoring – Occupational hygiene.*
- b) Pre-employment / Pre-placement medical examination.*
- c) Periodic health check-up / examination.*
- d) Infrastructure for occupational health monitoring.*

The Frequency for Periodic health check-up / examination of NRL has been decided as follows:

<i>Sl. No.</i>	<i>Area</i>	<i>Frequency</i>
<i>1.</i>	<i>Hazardous</i>	<i>Half- yearly</i>
<i>2.</i>	<i>Less hazardous</i>	<i>Annually</i>
<i>3.</i>	<i>Non- hazardous</i>	<ul style="list-style-type: none"><i>• Annually the employees of age 50 yrs and above.</i><i>• Once in 2 yrs for employees of age group 40 – 50 yrs.</i><i>• Once in 3 yrs for employees of age group below 40 yrs.</i>

- 19. The Industry must submit compliance report of action taken on the conditions given by the Board before commissioning of the Plant.**

-Complied.

- 20. Adequate trees should be planted and maintained in the vacant spaces of the premises and all around the factory and township.**

Massive plantation of different variety has been carried out mainly along the roadside areas, vacant places, in ETP and in the gardens within the Refinery as well as Township also.

- 21. The Board will be at liberty to withdraw the “NO OBJECTION CERTIFICATE” at any time without notice if necessary steps for prevention of pollution and preservation of environment is not taken by the Industry as per mentioned condition.**

-Noted.

- 22. The issuance of this NOC does not convey any property right in either real or personal property or any exclusive privileges nor does it authorises any injury to private property nor any invasion right nor any infringement of Central, State or Local Laws or Regulations.**

-Noted.

- 23. The NOC does not authorize or approve the construction of any physical structures of facilities or the undertaking of any work in any natural watercourse except of the works specially instructed herein.**

-Noted.

- 24. Effluent treatment plant must be constructed before commissioning of the plant and the treated effluent must conform to the MINAS and IS: 2490 all the time.**

-The Effluent Treatment Plant equipped with tertiary treatment facilities constructed before the commissioning of the plant. Treated effluent quality is checked regularly as per new MOEF notifications before every discharge from ETP for reuse in the Laboratory and has been intimated regularly to PCB, Assam and CPCB, Shillong on monthly basis. It is worth-mentioning that since October, 2006 no effluent has been discharged outside the refinery. This is further enhanced by implantation of ETP modernization and VOC recovery system in ETP.

- 25. Construction of Effluent Treatment Plant must be started before starting the construction of the Refinery itself.**

-That has been complied

- 26. Treated effluent shall be discharged through a closed pipeline into the mid-stream of river Brahmaputra after confluence point of Dhansiri river and arrangement is to be made by the Refinery authority for proper mixing.**

-Permission has been obtained from PCB, Assam to discharge treated effluent at the downstream of jetty in the mid-stream of river Dhansiri through a closed pipeline.

However, no treated effluent has been discharged since October, 2006 into the River Dhansiri or any other natural water body as 100% reuse of treated effluent is sustained.

- 27. The applicant shall provide sampling arrangement in the treated effluent carrying closed pipeline at two sites i.e. near NH crossing and before the final outfall point at Dhansiri mukh. Easy access for the sample collection at these two sites will have to be made by the Refinery Authority.**

-Provision for sampling has been made at various locations in the EDPL at the initial point of the pipeline, near Township and at the final discharge point. However, the requirement is not applicable at present as no treated effluent is discharged outside the refinery. 100% reuse of treated effluent is sustained.

- 28. Regular monitoring is to be done for the parameters, TOC and others as mentioned in MINAS and reports are to be submitted fortnightly to the Board.**

- The relevant parameters for treated effluent have been monitoring regularly as per the latest CPCB norms and the monitoring reports are being submitted regularly to the PCBA, Regional Office, Golaghat, CPCB Zonal Office, Shillong on monthly basis as per requirement stipulated in the Consent for the refinery.

- 29. The detailed design of the ETP will have to be submitted to the Board before starting construction of ETP.**

- The same has been submitted before starting the construction of ETP.

- 30. The time schedule for construction and commissioning of the ETP should be submitted to the Board quarterly.**

- This has been complied.

31. Necessary arrangements for sample collection at the following points are to be provided by the industry before commissioning of the plant.

- a) Before entering ETP
- b) Before aerobic system of ETP
- c) After leaving ETP (on EDPL)
- d) At interim point of effluent carrying pipeline near NH crossing
- e) Ultimate point of effluent discharge

-Sampling points as required have been provided.

32. Samples will have to be collected and analyzed by the industry from the above points as per condition 31 above and as well as from the following points.

- a) Near each village situated on the bank of the Dhansiri River.
- b) Receiving water course (i.e. Brahmaputra) after it receives effluent from the refinery.

The applicant is to submit the monitoring results to the Board fortnightly.

-The discharge of treated effluent from the Refinery and from the STP, NRL Township has been stopped since October, 2006 and April, 2007 respectively, as such Monitoring of Dhanisiri water becomes irrelevant. Request has been placed to PCBA for discontinuation of the same.

33. Recording and monitoring activities and results:

- a) M/s. IBP Co. Ltd., are to monitor effluent everyday and maintain records of all information resulting from monitoring activities.
- b) The industry is to record for each measurement for samples to be taken to the requirement of this NOC with the following information.
 - i) The date, exact place and time of sampling
 - ii) The dates on which analysis performed
 - iii) Who perform the analysis
 - iv) Method used for the analysis
 - v) The results of all required analysis
- c) The industry is to retain for minimum of five years of all records of monitoring activities and results including all records. This period of retention shall be extended during course of any unresolved litigation regarding the discharge of Pollutants by the applicant or when required by the Board.

Regular monitoring of effluent quality has been carried out and records are kept properly.

- 34. Monitoring information shall be submitted and reported by submitting a discharge monitoring report form duly filled in and signed to the Boards Office.**

- This is complied.

- 35. The applicant will have to install automatic pH recorder, flow recorder and TOC analyzer on the effluent carrying line.**

-Flow recorder, TOC analyser and automatic pH recorder have been installed in ETP to monitor the effluent quality going through the Effluent Disposal Pipeline (EDPL). However, the discharge of treated effluent from the Refinery and from the STP, NRL Township has been stopped into River Dhansiri since October, 2006 & April, 2007 respectively.

- 36. The applicant shall not discharge effluents in excess defined as harmful in the NOC. In addition the refinery shall not discharge hazardous substances into watercourses in quantities defined as harmful in the NOC given by the Board.**

- There is no discharge of effluent from the refinery into River Dhansiri since October, 2006. No hazardous substances are discharged into any watercourses.

- 37. Nothing in this NOC shall be deemed to preclude than institution of any legal action nor receive from any responsibilities or penalties to which the industry is or may be liable.**

-Noted.

- 38. Applicant shall take adequate and efficient measures so that sulfur is recovered fully and there will not be any release of Sulfide in the effluent. Special monitoring arrangement is to be carried out by the applicant after the coagulation unit as well as at final outlet before disposal.**

-To minimize sulphur pollution, a Sulphur Recovery Block has been installed and is functioning continuously. Monitoring of sulphide in the effluent is done regularly before every reuse and sulphide level in the final treated effluent is maintained well within the standards.

- 39. The applicant must take special care to contain all the untreated effluent within their compound at the time of malfunctioning of ETP and must be treated to the prescribed limit before disposal.**

-Guard ponds and Surge Tanks of sufficient holding capacity have been provided in ETP to cater for emergency need. This is further enhanced by implantation of ETP modernization and VOC recovery system in ETP.

- 40. Refinery authority must take special care to keep the noise level within permissible limit all the time. As suggested by NEERI, Green belt development is to be taken up right from the time of construction.**

- A Green Belt covering a total area of around 60 hectares of land and around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT has been developed as per the Green Belt Development Plan. (The Green Belt Development Plan has been submitted to MoEF along with the Half Yearly Report to MOEF on the 15th October, 2001).

Massive Plantation have been carried out in the Green Belt so as to it can provide a natural barrier for attenuation of noise and air pollution. Nos of local variety have been planted including some fruit bearing samplings in & all around Green Belt.

Phase wise replantation is in progress in various locations in Green Belt to increase the density.

-Noise monitoring inside the work zone has been carried out on a regular basis, and if required, corrective action is taken accordingly.

- 41. Authority shall take adequate care to keep the impact of noise within the limit at the time of loading/unloading and transportation etc.**

-Adequate care has been taken.

- 42. IBP Ltd. shall construct and commission the sewage treatment plant for their Township area and the treated effluent must confirm IS standards before discharging, special care must be taken to contain the pathogens and coliforms within count before discharge.**

-A separate Sewage Treatment Plant for Township area has been constructed and in operation. No effluent is discharged into River from STP, the same has been routed back to ETP at refinery.

- 43. Disposal of Sludge:**

a) Intake Water Treatment:

Solids, sludges, dust, silt or other pollutants separated from or water prior to use by IBP Ltd. shall be disposed off in such a manner as to prevent any pollutant from such materials from entering any such water. Any live fish or other animals

collected or trapped as a result of intake water screening or treatment may be returned to water body habitat.

-This has been complied.

b) Waste /Water Treatment:

For disposal of sludge from the treatment plant, IBP Ltd., shall have to take separate specific permission from this Board. IBP Ltd. shall apply for such permission giving three months time for detailed scrutiny of their proposal for disposal off should be intimated to the Board immediately. Detailed proposal for sludge disposal shall be submitted by IBP Ltd. immediately.

-Based on NEERI's report on Solid Waste Management, one Secured Land Fill was constructed for disposal of sludge from the treatment plant / solid waste. Proposal of the same was submitted to both i.e. MoE&F and PCB, Assam and due permission for disposal of sludge in the Secured Landfill was received from PCB, Assam. NRL has installed another SLF of capacity 6000 m3 as per CPCB recommendations.

c) Hazardous waste disposal:

For disposal of hazardous waste generated from the refinery, IBP Ltd. shall have to take specific permission from the Board separately.

-Hazardous waste disposal was incorporated in the above proposal and authorization has been granted for disposal of sludge in the Secured Landfill by PCB, Assam. Some quantity has been sold to authorised recyclers.

d) Spent Catalyst:

Spent Catalysts must be disposed off through sale only. No spent catalyst should be disposed at landfill site and must not be buried underground in concrete silo/bunker under any circumstances.

- Spent catalyst has been sold to the CPCB registered purchasers.

e) Sewage Treatment:

Solid waste generated in the sewage treatment plant should be disposed off in a proper scientific manner so that it will not create any health hazard in the environment.

-Sludge drying beds have been provided in the Sewage Treatment Plant at Township

- 44. Before applying “Consent To Operate” after commissioning for discharge of treated effluent, the applicant must clarify to the Board that IBP Ltd. have installed an alternative electric power source sufficient to operate all the facilities utilized by the applicant to maintain compliance with terms and conditions of this NOC.**

- Complied.

- 45. Arrangements are to be made for analysis of bottom sludge of their units particularly of the heavy metals.**

- Equipment for analysis of heavy metals in bottom sludges like Atomic Absorption Spectrophotometer, Flame Photometer and Spectrophotometer have been procured.

- 46. The applicant shall analyze the solid waste and submit the report to the Board regularly.**

-Analysis of solid waste has been carried out regularly and submitted to Pollution Control Board.

- 47. The applicant shall take adequate care to contain the raw materials, chemical products etc within the site itself and proper protection arrangements will have to be made around the raw material, product storage area. No seepage/leakage shall take place from this area.**

Raw materials and products are stored in their respective tanks with all the necessary precautions required for.

- 48. Height of chimneys shall be such that it allows proper dilution of the emitted as and it shall not be less than 30 mtrs under any circumstances.**

-All the chimney heights are much more than 30 mtrs.

- 49. Stack emissions from the industry must meet the standards prescribed by PCB and Dept. of Environment, Govt. of India all the time.**

-Monitoring of stack emission has been carried out regularly as per the latest MOEF notification and are well maintained within the standards. The monitoring results are submitted regularly to the PCBA Regional Office, Golaghat, Shillong as per the requirements.

- 50. The applicant is to contain the total sulphur emission into the atmosphere as SO₂ within 256 kg/hr.**

-This is complied

51. Fugitive emissions from the refinery should not be more than 6.11 kg/hr.

- *Regular monitoring of fugitive emission has been carried out in various locations inside the refinery using GMI.*

The GMI survey has been carried on all gas/vapour valves, light liquid valves, hydrogen valves, light liquid pump seals, hydrocarbon compressor seals, hydrogen compressor seals, safety relief valves, flanges, connections, open-ended lines, drains, tankages, furnaces etc.

52. Ground Level conc. of SO₂ and NO_x at Kaziranga National Park, due to the release of gases from the refinery shall not exceed 2.25 and 3.51 microgram per cubicmetre resp. during highly unstable condition. Also, during stable condition, SO₂ and NO_x shall not exceed 25.0 and 39.0 microgram per cubicmetre resp.

-As a compliance of the above, an Air Quality Monitoring Station has been installed at Agratoli, near Kaziranga to monitor the required parameters on a regular basis. The same have been monitored regularly and the value found within limit. Action initiated to install another CAAQMS inside the refinery premises in the down wind direction.

53. The refinery authority must also contain the CO, HC within the specified limit and as per NEERI's report.

-CO and HC are monitored along with the parameters SO₂, NO_x and SPM in the ambient air quality monitoring. The same are found to be within standards as prescribed in the Consent for Numaligarh Refinery by PCB, Assam.

However, NRL has started monitoring of ambient air quality in line with NAAQS-2009 in totality since April' 2011. Further, real time emission data has been transmitted to CPCB server on continuous basis.

54. IBP Ltd. must install automatic SO₂ and flow measuring device at all the stacks. If at any stage SO₂ exceeds the permissible limits immediate shutdown of operations will have to be ensured.

-Automatic SO₂ online analysers have been installed in all the refinery unit stacks. The total SO₂ emission in terms of kg/hr from the stacks is done on the basis of fuel consumption in the furnaces and sulphur content in the fuel.

55. Systematic Green Belt development is to be made by the applicant in and around the refinery site as well as in Township area. Selected trees should be of fast growing with thick canopy cover, perennial and evergreen, with large leaf area, resistant to specific air pollutants.

-A Green Belt of around 100 mtrs width around the refinery and around 25 mtrs width around the NRMT covering a total area of land around 60 hectares has been developed. The Green Belt has been developed & maintain as per the Green Belt development plan.

56. The applicant will have to take Socio-Economic Development of the area.

-Various forms of Community Development Schemes have been carried out regularly.

57. Ambient Air Quality Monitoring is to be done daily by the industry in and round factory as well as at Kaziranga National Park and results must be submitted monthly to the Board.

- The ambient air quality monitoring is being carried out at 5 locations at a frequency of 8/9 samples per month, taken twice a week 24 hourly at uniform interval. (This is as per the statutory requirement of CPCB, where the minimum no. of samples to be analyzed for a station is 104 samples in a year). The monitoring results are submitted regularly to the PCBA Regional Office, Golaghat and CPCB Regional Office, Shillong in every month.

However, NRL has started monitoring of ambient air quality in line with NAAQS-2009 in totality since April' 2011. However, NRL has started monitoring of ambient air quality in line with NAAQS-2009 in totality since April' 2011. Further, real time emission data has been transmitted to CPCB server on continuous basis.

58. Stack Monitoring is to be done daily and results must be submitted fortnightly to the Board.

-This has been complied.

59. The applicant is to submit the detailed Environmental Management Plan, Disaster Management Plan, and Project Report before commissioning the refinery

-The reports have been submitted.

60. The applicant will have to install water meters at all the water carrying pipelines before commissioning the refinery.

-Water meters have been installed on all the water carrying pipelines.

61. Automatic pH monitoring of effluent should be provided for by installing automatic pH indicator and recorder.

-Automatic pH analyzer has been installed.

62. Suitable flow measuring arrangements with automatic measuring devices should be installed in the outlets to measure accurately the quantities of effluents discharged. No effluent shall remain unmeasured and records of daily flow should be maintained.

- Flow meter with totalizer has been installed on the effluent discharge pipeline and records are maintained daily. The treated effluent is reused in the Refinery premises only, there is no discharge into River Dhansiri.

63. The applicant is to take special care to raise the height of Electric Poles including towers so that animals can pass the area safely. If necessary, alternative arrangements is to be made for safe movement of animals.

-Steps have been taken accordingly.

64. The refinery authority will have to strictly adhere to the provisions of the Water (Prevention and Control of Pollution) Act, 1974; Water (Prevention and Control of Pollution) Amendment Acts, 1978 &1980; Air (Prevention and Control of Pollution) amendment Act, 1981; Environment (Protection) Act 1986.

- This is complied.

65. The Board will be at liberty to withdraw the “NO OBJECTION CERTIFICATE” at any time without notice if necessary steps for Prevention and Control of Pollution and preservation of environment is not taken by IBP Ltd. as per above mentioned conditions.

-Noted.

HALF YEARLY CER REPORT 2025-26



As part of its commitment to sustainable, responsible, and inclusive industrial development, Numaligarh Refinery Limited (NRL) has incorporated a comprehensive Corporate Environment Responsibility (CER) component into its proposal for the Polypropylene Unit (PPU) of 360 KTPA capacity at Village Ouguri Chapori, Morongi Mouza in Golaghat district, Assam. The proposal was thoroughly reviewed and approved by the Ministry of Environment, Forest and Climate Change (MoEF&CC) during the Expert Appraisal Committee (EAC – Industry 2) meeting held on 13–14 June 2024. In alignment with MoEF&CC guidelines, NRL has allocated ₹15 crore towards Extended Environmental Management Plan (EMP) activities under the CER framework—an allocation made over and above the regular EMP cost—demonstrating the company’s proactive approach to environmental protection and community upliftment.

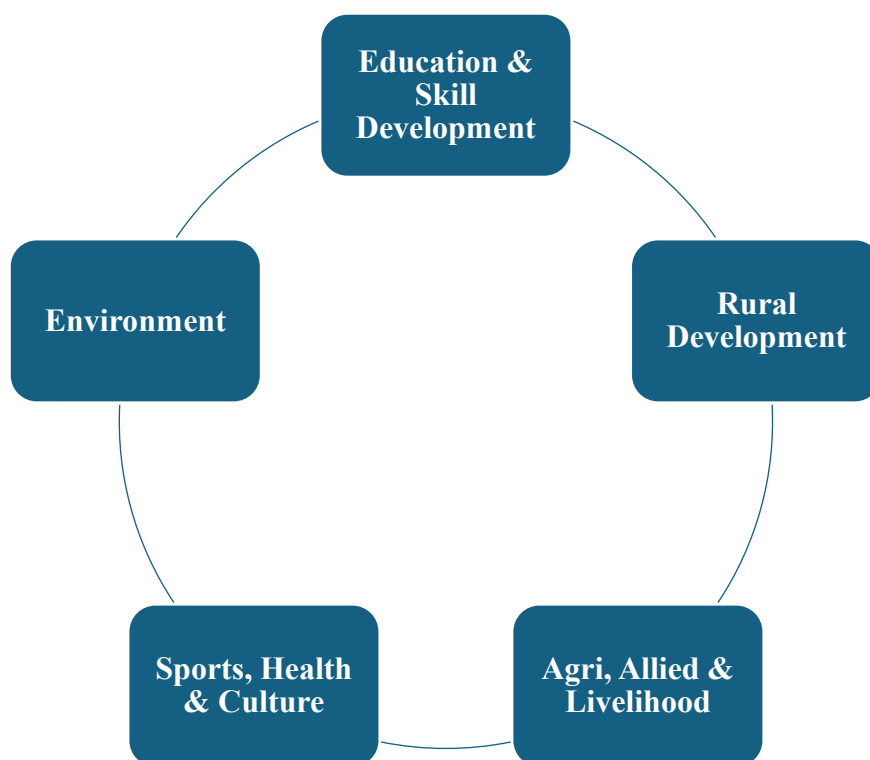
In accordance with the Environmental Clearance (EC) conditions for the NRL Expansion Project (NREP), extensive consultations were held with key stakeholders, including the Deputy Commissioner, Golaghat; officials from Gaon Panchayats and the Block Development Office; representatives of the Assam State Rural Livelihood Mission (ASRLM); and various local organisations. These consultations helped identify priority areas for intervention to enhance the socio-economic and environmental well-being of communities around the refinery. The discussions highlighted the need for rural development initiatives, support for farmers through scientific cultivation and livestock promotion, improved access to education and skill development, health-related services, environmental conservation measures, and the promotion of sports and cultural activities. A significant concern raised was the need to counter the adverse effects of the COVID-19 pandemic by introducing income-generating schemes for unemployed youth and women.

Based on these collective inputs, the first Steering Committee meeting held on 25 June 2021 identified five broad thematic areas to guide CER interventions:

- (1) Agri-allied and Livelihood, (2) Education and Skill Development, (3) Environment, (4) Rural Development, and (5) Sports, Health & Culture.

Theme-wise Summary (In Crore)

Theme	Approved Amount (In Cr)	Released amount FY 2025–26 (In Cr) (April-Sep.)
Agri Allied and Livelihood	4.79	2.00
Education and Skill Development	0.61	0.19
Environment	0.92	0.13
Rural Development	6.72	2.31
Sports, Health and Culture	1.64	0.77
Total	14.68	5.40



1. AGRI ALLIED & LIVELIHOOD

Under the Agri Allied & Livelihood theme, NRL has focused on strengthening income generation, promoting rural entrepreneurship, and enhancing livelihood security across multiple villages. Across NREP and PP operations, extensive support has been extended for establishing dairy, poultry, goatery, piggery, and fishery units, enabling families to diversify their income sources. Individual beneficiaries such as Puneswar Ghatowar, Naren Saikia, Bharat Das, Amrit Bora, and Lili Saikia received assistance to set up goatery and other livestock-related ventures, significantly improving their economic resilience. To promote rural entrepreneurship, NRL supported the establishment of small enterprises including grocery stores, catering service centres, and handloom units, enabling self-employment for local youth and women. A notable effort includes the initiation of a handloom training centre at Marangi College and a 45-day weaving skill development programme, which help preserve traditional crafts while opening up economic opportunities for trainees. Community-level livelihood enhancement activities were also introduced. These included supply of loom items to handloom groups, establishment of a water hyacinth product manufacturing unit, and provision of jute harvesting machinery for Farmers' Custom Hiring Centres. Agricultural protection measures like the installation of solar fencing at Marangi Pathar to prevent crop damage—played a vital role in safeguarding farmers' produce. Additionally, NRL supported low-cost housing for homeless families near the refinery under the PP Unit. Infrastructure-related livelihood support such as scaffolding pipes for youths, introduction of a six-seater speed boat at Sankar Beel, and engagement of Joint Liability Groups further strengthened local income opportunities.

2. EDUCATION & SKILL DEVELOPMENT

Education and skill development remain key priorities under both CER plans, with targeted support for school students, youth, and marginalized communities. Under NREP, support continued for Class 9 and 10 students in refinery-adjacent areas with a focus on improving academic performance, building confidence, and enhancing exam preparedness. Additionally, to assist underserved children from economically weaker sections, initiatives were proposed to improve educational access in the Marangi Block. Infrastructure-building played an important role, including the proposal to construct a Library-cum-Learning Centre at Letekuchapori, which will function as a community knowledge hub. Additionally, the construction of a covered stage at Union Government High School, Ranasahi (Odisha) will enable cultural, academic, and special events. Digital literacy initiatives were implemented to empower students and families in remote communities with essential technological skills. Under the PP Unit, a dedicated 8-month academic and co-curricular development programme for Tea Tribe children was undertaken by the Jibanjyoti Club. This programme focuses on improving attendance, learning levels, and engagement in extracurricular activities, especially for children living in marginalized settings.

3. RURAL DEVELOPMENT

Rural infrastructure development formed a major component of the CER activities during this reporting period. Under NREP, several roads and public service infrastructures were upgraded. These include the construction of the Doria to Karunating road (1 km) and an ICBP road from Jatipotia Gaon to Mitham Chapori Road, which significantly enhance rural connectivity. Renovation of the Circle Office at Marangi improved administrative functioning and public service delivery. Various community organizations were supported in constructing worker accommodation units, providing both employment and welfare benefits to labourers associated with refinery activities. Welfare amenities like folding beds, inverters, and water purifiers were also distributed to labour camps. Under the PP Unit, rural development works included repairing the playground at Ouguri Saora Gaon, enhancing recreational infrastructure for children, and constructing a Community Hall-cum-Information Centre at Marangi, which will serve as a central venue for community gatherings, cultural activities, and development programmes.

4. ENVIRONMENT

Environmental conservation and ecological protection remain central to NRL's CER commitments. Under NREP, a key initiative was the construction of a Food Waste Disposal Tank at Telgaram, developed to promote scientific waste management and reduce environmental pollution. A major plantation activity involving seedless lemon saplings at Bogidhola Muga VGR was undertaken in collaboration with the Sericulture Department and local development bodies, enhancing green cover and supporting ecological sustainability. Dust mitigation work outside NRL premises, carried out by empanelled contractors, has led to improved air quality, safer road conditions, and reduced respiratory discomfort for commuters and residents. Under the PP Unit, a large-scale Mass Cleanliness Drive was organized to clear legacy waste, promote hygiene, and ensure a cleaner environment in and around refinery areas. This initiative fostered community participation and awareness on waste management. Collectively, these activities support improved waste management, greener landscapes, and healthier ecosystems around NRL's operational zones.

5. SPORTS, HEALTH & CULTURE

Cultural preservation, youth engagement, and wellness promotion were key themes of the CER efforts. Under NREP, assistance was provided for organizing a four-day Jhumur workshop for tea tribe youth, preserving traditional art forms and encouraging local talent. A one-act play workshop on Swachhata and environmental themes was also conducted to engage students creatively on social issues. Construction of information centres and cultural spaces further strengthened community participation and cultural activities. Under the PP Unit, major initiatives included the Wellness & Balance Yoga Programme conducted in the Marangi area, promoting mental and physical well-being among adults. Road safety enhancements in the Bishnupur area also supported safe community movement during cultural events. Health and livelihood support activities included assistance to livestock-dependent farmers through the State Veterinary Dispensary and realignment of the water supply line at Rowduar Village through the PHE Department, ensuring reliable access to clean water.

Photo Gallery





Mass Cleanliness drive in surrounding areas of the Refinery





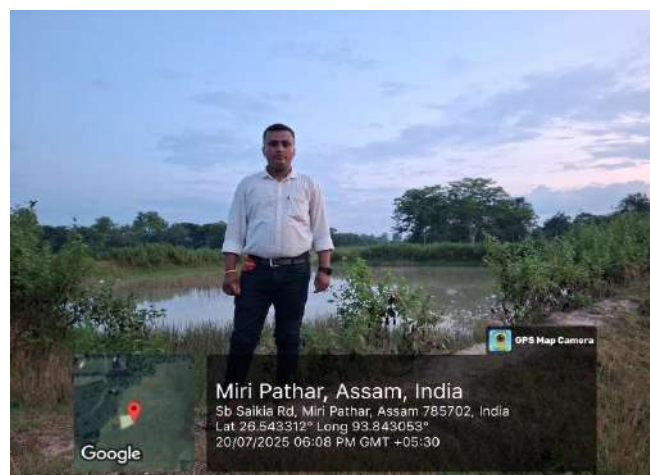
Solar Fencing at Marangi Pathar



Pancharatna Joint Liability Group



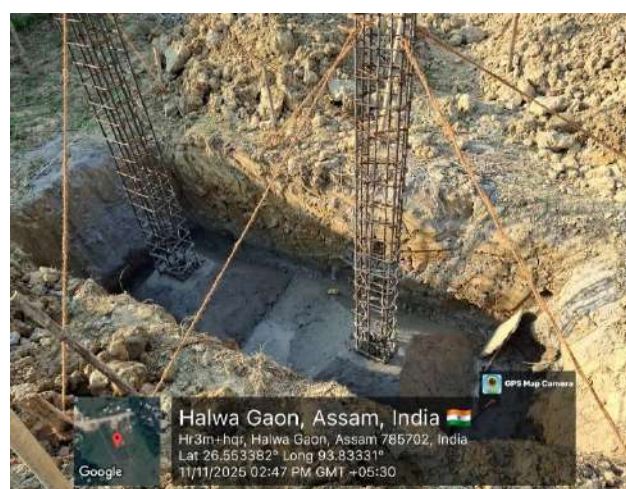
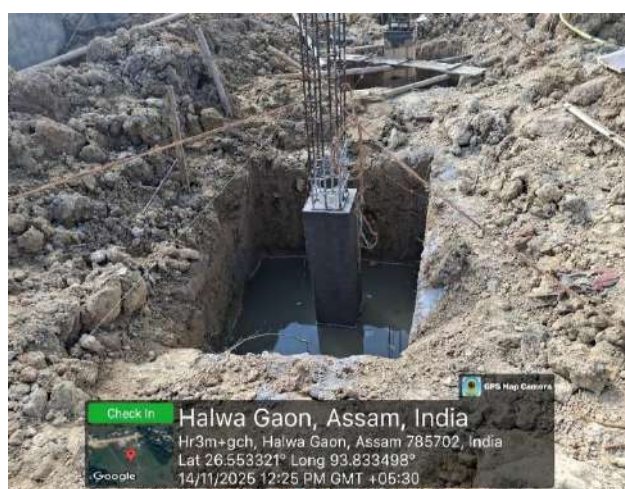
Beneficiary of Grocery Store to Wahid Khan Choudhury



Beneficiary of Fishery To Nilamoni Gogoi



Livelihood Support to Enos Saora and Baburam Chetry



Construction of Marangi Press Club



Handloom Training at Marangi



Yoga Training at Marangi Bagan



Repairing of playground at Ouguri Saora



Plantation of seedless Lemon tree sapling at Bogidhola Muga VGR, Marangi



Dhondasham Ali from Kushal Konwar Setu to Jorhatia Road constructed under CSR / CER fund of NRL

ANNEXURE-D

NUMALIGARH REFINERY LIMITED DETAILS OF ENVIRONMENTAL EXPENDITURE

<i>Total cost in Rs</i>			
SI No	Name of the Facilities	Apr-Sep25	FY 2025-26
1	Effluent Treatment plant	46,521,729.50	46,521,729.50
2	Sulphur Recovery Unit	37,453,973.85	37,453,973.85
3	Pollution & Environmental Expenses	5,199,706.23	5,199,706.23
4	Environmental Cell	6,561,495.96	6,561,495.96
5	R & M Expenses	19,255,398.50	19,255,398.50
	Grand total	114,992,304.04	114,992,304.04

Ref:

Ref: NRL/ENV/PCBA/25-26/04

Date:

Date: 28 June 2025

To,
The Member Secretary,
Pollution Control Board, Assam,
Bamunimaidam,
Guwahati-781021

Sub: Submission of Annual Return on Hazardous Waste (Management & Handling) as per the provision of "Hazardous and other Waste (Management & Trans boundary Movement) Rules, 2016" in Form- 4 for the year 2024-25.

Dear Sir,

We are submitting herewith the Annual Return on Hazardous Waste (Management and Handling) as per the provision of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 in Form-4 for the year 2024-2025.

White copies of Manifest (Form-10) for the Hazardous Waste dispatched during FY-24-25 have been enclosed as Annexure-I.

Hope the details provided shall meet the requirements.

Thanking you,

Yours faithfully,



Kothapalli Srinivas
DGM (TS-Environment)
Numaligarh Refinery Limited

CC: RO, PCBA , Golaghat

FORM - 4

[See rules 6(5), 13(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period **April'2024 to March'2025**

1. Name and address of facility : **Numaligarh Refinery Limited,**
P.O. NRP -785699
Golaghat, Assam.
2. Authorization No. and Date of issue: **NO: WB/GOL/T-205/11-12/137/1395**
Date:29.07.2024(Validity 31.03.2029)
3. Name of the authorized person and: **Mr. Bimlesh Kumar Gupta, CGM(TS)**
full address with telephone, fax **Technical Services Department.**
number and e-mail: **2nd Floor, Administrative Building,**
Numaligarh Refinery Limited
PO: NRP 785699, Golaghat, Assam
E mail: bimlesh.gupta@nrl.co.in
4. Production during the year (product wise), wherever applicable: **N/A**

Part A. To be filled by hazardous waste generators

1. Total quantity of waste **generated** category wise: Year: 2024-25

Sl.no.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Generated for the Year 2024-25
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	265.04 MT
2.	Schedule-I, Category- 4.2: Spent Catalyst	NIL
3.	Schedule-I, Category- 4.3: Slop oil (Slop oil of OM&S)	40377 MT
4.	Schedule-I, Category-5.1: Used or Spent Oil (Spent Lube Oil)	6.193 MT
5.	Schedule-I, Category- 33.1: Empty barrels/containers contaminated with hazardous chemicals/wastes	Empty Drums:3060 NOS Damaged Drums: 0.3 MT
6.	Schedule -I, Category- 35.1: Exhaust air or gas cleaning residue (CPC dust)	338.17 MT
7.	Schedule-I, Category-35.3: Chemical Sludge from wastewater treatment	64.5 MT
8.	Schedule-I, Category-35.4: Oil and grease skimming (Slop Oil of ETP)	17549 MT

2. Quantity **dispatched**: Year: **2024-25**

Sl.no.	Category of Hazardous Waste as per Schedule I/ Category of other waste as per Schedule-III	Quantity Dispatched for the Year 2024-25	Destination (a. Recyclers, (b. Coprocessing in cement plant (c. Actual User/Utilizer (d. Common TSDF)
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	22.580 MT	a. <u>Dispatched to Recyclers</u> • Falak Industrials Pvt. Ltd, Jharkhand
2.	Schedule-I, Category- 4.3: Slop oil (Slop oil of OM&S)	3988 MT	a. <u>Dispatched to Recyclers</u> • Asian Petrochemicals, Bhubaneshwar • Bristol Petroleum Pvt. Ltd, West Bengal • Falak Industrials Pvt. Ltd, Jharkhand • Fine Refiners Pvt. Ltd, Gujarat • L. B. S. Industries, Manipur • Merlyn Hydrocarbons Pvt Ltd, Karnataka • Priya Petro Products, Tamil Nadu • Shri Bankey Bihari Chemicals, Uttar Pradesh
4.	Schedule-I, Category-33.1: Empty barrels/containers contaminated with hazardous chemicals/wases	Empty drums = 2775 NOS Damaged drums: 1.2 MT	a. <u>Dispatched to Recyclers</u> Empty Drums : • MS Drums suppliers, West Bengal • OM Industries, Haryana • A Mathira Traders, Tamil Nadu Damaged Drums: A Mathira Traders, Tamil Nadu

3. Quantity **utilized in-house**, if any): Year: **2024-25**

Sl.no.	Category of Hazardous Waste Utilized as per Schedule I / Category of other waste as per Schedule-III	Quantity Utilized for the Year 2024-25	Process in which utilized
1.	Schedule-I , Category- 4.3: Slop oil from process units	29421 MT	Reprocessed in CDU/VDU
2.	Schedule-I, Category-33.1: Empty barrels/containers contaminated with hazardous chemicals/wastes	Empty drums = 768 NOS	For internal reuse
3.	Schedule-I, Category-35.4: Oil and grease skimming (Slop Oil of ETP)	18112 MT	Internal Transfer from ETP to OMS for reuse

4. Quantity in **storage** at end of the year (31.03.2025):

Sl.no.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Stored at the beginning of the year 24-25 (Opening Stock)	Quantity Stored at the end of the year 24-25 (Closing Stock)
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	1885.385 MT	2127.845
2.	Schedule-I, Category- 4.2: Spent Catalyst	3.22 MT	3.22 MT
3.	Schedule-I, Category- 4.3: Slop oil (Slop oil of OM&S)	77343 MT	84311 MT
4.	Schedule-I, Category-5.1: Used or Spent Oil (Spent Lube Oil)	6.398 MT	12.591 MT
5.	Schedule-I, Category- 33.1: Empty barrels/containers contaminated with hazardous chemicals/wastes	Empty drums = 4404 NOS Damaged drums: 0.9 MT	Empty drums = 3921 NOS Damaged drums: NIL
6.	Schedule -I, Category- 35.1: Exhaust air or gas cleaning residue (CCU dust)	1752.08 MT	2090.25 MT
7.	Schedule-I, Category-35.3: Chemical Sludge from wastewater treatment (Chemical and Oily Sludge from ETP)	NIL	NIL
8.	Schedule-I, Category-35.4: Oil and grease skimming (Slop Oil of ETP)	7444 MT	6881 MT

Part B. To be filled by Treatment, storage and disposal facility operators

(Occupiers disposing Hazardous waste in Captive TSDF such as Secured Landfill Facility (SLF), through Bioremediation and secured landfilling and through captive Incineration)

1. Total quantity received during **2024-25** : **As per Part -A**
2. Quantity in stock at beginning of year (on **01.04.2024**) :

Sl.no.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Stored at the beginning of the year 24-25 (Opening Stock)
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	1885.385 MT
2.	Schedule-I, Category-35.3:	NIL

	Chemical Sludge from wastewater treatment (Chemical and Oily Sludge from ETP)	
--	--	--

3. Quantity treated – : Nil

4. Quantity disposed in **Landfills** as such and after treatment (**During 2024-25**):

Sl. No.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Disposed for the Year 2024-25 in Captive Secured landfill
1.	Schedule-I, Category-35.3: Chemical Sludge from wastewater treatment (ETP Sludge)	64.5 MT

5. Quantity incinerated (if applicable) - : N / A

6. Quantity processed other than specified above -: - **Disposal through Bioremediation**

: - **Disposed through authorized recyclers**

Sl.no.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Disposed for the Year 2024-25 through Bioremediation
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	NIL

Sl.no.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity Disposed for the Year 2024-25 through CPCB approved recyclers
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	22.580 MT

7. Quantity in **storage** at the end of the year (on 31.03.2025):

Sl. No.	Category of Hazardous Waste as per Schedule I / Category of other waste as per Schedule-III	Quantity in storage at the end of the year 2024-25
1.	Schedule-I, Category-4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	2127.845 MT
2.	Schedule-I, Category-35.3: Chemical Sludge from wastewater treatment (ETP Sludge)	Nil

Part C. To be filled by recyclers or co-processors or other users : N/A

1. Quantity of waste received during the year –
 - (i) domestic sources
 - (ii) imported (if applicable)
2. Quantity in stock at the beginning of the year -
3. Quantity recycled or co-processed or used –
4. Quantity of products dispatched (wherever applicable) –
5. Quantity of waste generated -
6. Quantity of waste disposed -
7. Quantity re-exported (wherever applicable)-
8. Quantity in storage at the end of the year –



Date : 28.06.2025
Place : NRL, Golaghat, Assam

Signature of the Occupier or
Operator of the disposal facility

Ref: NRL/ENV/PCBA/25-26/08

Date: 29 September 2025

To
The Member Secretary,
Pollution Control Board, Assam,
Bamunimaidam,
Guwahati-781021

Sub: Submission of Environmental statement in Form - V for the year 2024-25

Dear Sir,

We are submitting herewith the duly filled-in "Environmental Statement" in Form-V for the year 2024-25 for your kind perusal.

Hope, the same shall meet the requirement.

Thanking you.

Yours faithfully,



(Kothapalli Srinivas)
DGM (TS-Environment)
Numaligarh Refinery Limited

Copy: RO, PCBA, Golaghat

[FORM – V]

(See rule 14)

**Environmental statement for the financial year ending the 31st March 2025
(For Numaligarh Refinery Limited, Golaghat, Assam)**

PART – A

- | | | |
|---|---|--|
| (i) Name and address of the owner/occupier of the industry operation or process | : | Numaligarh Refinery Limited
P.O. Numaligarh Refinery Project
Golaghat -785699, Assam |
| Co-ordination Office | : | Tolstoy House, 6th Floor
15-17 Tolstoy Marg
New Delhi-110001 |
| Registered Office | : | 122A, G.S. Road
Christian Basti
Guwahati-781005 |
| (ii) Industry category Primary ----(STC code)
Secondary----- (SIC Code) | : | Primary |
| (iii) Production capacity (Crude Throughput) | : | 3.0 MMTPA |
| (iv) Year of establishment | : | 22nd April, 1993 |
| (v) Date of the last environmental statement submitted | : | 28th Sept, 2024 |

PART – B

Water and Raw Material Consumption

(i) Water consumption m3/d

Process	:	3050
Cooling	:	5330
Domestic	:	3334

Name of Products	Process water consumption per unit of product output	
	During the previous financial year (FY-23-24)	During the current financial year (FY-24-25)
	(1)	(2)
(1) LPG		
(2) MS EURO VI		
(3) ATF		
(4) SKO		
(5) Wax		
(6) MTO	0.378*	0.364*
(7) HSD EURO VI		
(8) RPC		
(9) CPC		
(10) SULPHUR		

*Production (all products) : FY-24-25: 3062090 MT
: FY-23-24: 2502000 MT

(ii) Raw Material Consumption

Name of raw materials	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year (FY-23-24)	During the current financial year (FY-24-25)
Crude Oil	LPG	1.001*	1.003*
	MS EURO VI		
	ATF		
	SKO		
	MTO		
	HSD EURO VI		
	WAX		
	RPC		
	CPC		
	SULPHUR		

*Raw material consumption:

2023-2024

2024-2025

(T'put during the year (in MT))((Design Capacity: 3MMTPA)

2509675

3065591

PART - C

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

(1) Pollutants	Quantity of Pollutants discharged (mass/day), kg/day	Concentrations of pollutants discharges (Mass/volume) (avg.mg/L)(except pH)	Percentage of variation from prescribed standards with reasons
a) Water: Treated Effluent from ETP			
pH		7.41	All parameters are within prescribed limits/standards
Oil & Grease	1.29	1.09	
BOD3	9.84	8.32	
COD	35.94	30.39	
TSS	9.66	8.17	
Phenol	0.06	0.05	
Sulphides	0.00	<0.1	
CN	0.00	<0.02	
Ammonia as N	13.19	11.15	
Cr (Hexavalent)	0.00	0.00	
Cr (Total)	0.00	0.00067	
Pb	0.00	0.00	
Zn	0.05	0.04142	
Ni	0.00	0.00108	
Cu	0.00	0.00042	
Benzene	0.00	<0.1	
Benzo (a)- Pyrene	0.00	<0.2	
Hg	0.00	<0.01	
V	0.00	<0.2	
TKN	15.97	13.51	
P	1.25	1.06	

(1) Pollutants	CPCB Standard (mg/L-(except pH)
pH	6-8.5
OIL & GREASE	5.0
BOD3	15.0
COD	125.0
TSS	20.0
Phenol	0.35
Sulphides	0.5
CN	0.2
Ammonia as N	15.0
Cr (Hexavalent)	0.1
Cr (Total)	2.0
Pb	0.1
Zn	5.0
Ni	1.0
Cu	1.0
Benzene	0.1
Benzo (a)- Pyrene	0.2
Hg	0.01
V	0.2
TKN	40.0
P	3.0

b) Air			
1) Stack Emissions			
SO ₂	1477.89*	Stack wise emission data have been provided in Annexure-I	All parameters are within prescribed limits/standards
NO _x	1998.54		
CO	468.46		
SPM	326.31		
2) Ambient air	Ambient air quality data as per NAAQ-2009 standards for 5 manual ambient air quality monitoring stations installed for NRL have been provided in Annexure-II		

*(61.5 kg/hr SO₂ emissions against prescribed limit of 256 kg/hr)

PART – D

HAZARDOUS WASTES

(As specified under Hazardous Waste Management and Handling Rules, 2008 as amended up to date)

S. No.	Hazardous Wastes	Total Quantity (MT)	
		During the previous Financial Year (2023-24)	During the current Financial year (2024-25)
a)	From Process		
i)	Schedule-I, Category 4.1: Oil Sludge or emulsion (Tank Bottom Sludge)	Generation: 34.540 MT Disposed: 149.155 MT (to authorized recycler) Stock as on 31.03.24: 1885.385 MT	Generation: 265.04 MT Disposed: 22.580 MT (to authorized recycler) Stock as on 31.03.25: 2127.845 MT
ii)	Schedule-I, Category 4.2: Spent Catalyst	Generation: 189.94 MT Disposed: 189.24 MT (sold to recycler) Stock as on 31.03.24: 3.22 MT	Generation: Nil Disposed: Nil Stock as on 31.03.25: 3.22 MT

iii)	Schedule-I, Category 4.3: Slop oil (Slop oil of OM&S)	Generated: 46572 MT Processed in CDU/VDU: 31000 MT Stock as on 31.03.24: 77343 MT	Generated: 40377 MT Processed in CDU/VDU: 29421 MT Disposed: 3988 MT (to authorized recycler) Stock as on 31.03.25: 84311 MT
iv)	Schedule-I, Category-5.1: Used or Spent Oil (Spent Lube Oil)	Generation: 3.407 MT Disposed = 20.150 MT (to authorized recyclers) Stock as on 31.03.24: 6.398 MT	Generation: 6.193 MT Disposed= Nil Stock as on 31.03.25: 12.591 MT
v)	Schedule-I, Category- 33.1: Empty barrels/containers contaminated with hazardous chemicals/wastes	Generation: 5018 Nos Disposed: 1681 Nos Internal Reuse = 104 Nos Stock as on 31.03.24: 4404 Nos	Generation: Empty drums: 3060 Nos (Damaged: 0.3 MT) Disposed: Empty drums: 2775 Nos (Damaged: 1.2 MT) Internal Reuse = 768 Nos Stock as on 31.03.25: Empty drums: 3921 Nos (Damaged: Nil)
a)	From Pollution Control Facilities		
i)	Schedule -I, Category- 35.1: Exhaust air or gas cleaning residue (CPC dust)	Generation: 1099.94 MT Disposed: Nil Stock as on 31.03.24: 1752.08 MT	Generation: 338.17 MT Disposed: Nil Stock as on 31.03.25: 2090.25 MT
ii)	Schedule-I, Category-35.3: Chemical Sludge from wastewater treatment (Chemical and Oily Sludge from ETP)	Generated:6.34 MT Disposed: 6.34 MT (in SLF) Stock as on 31.03.24: 0 MT	Generated: 64.5 MT Disposed: 64.5 MT (in SLF) Stock as on 31.03.25: 0 MT
iii)	Schedule-I, Category-35.4: Oil and grease skimming (Slop Oil of ETP)	Generation: 19915 MT Disposed: 797 MT (to authorized recycler) Internal Reuse: 20174 MT Stock as on 31.03.2024: 7444 MT	Generation: 17549 MT Disposed: Nil (to authorized recycler) Internal Reuse: 18112 MT Stock as on 31.03.25: 6881 MT



PART – F
Solid Wastes

	During the current financial year (2023-24)	During the current financial year (2024-25)
(a) From Process		
Incinerable non-hazardous substances	Generation 4370 m ³ = 920 MT	Generation 4370 m ³ = 920 MT
(b) From pollution control facilities- NIL		
(c) (1) Quantity recycled or re-utilized within the unit.	NIL	NIL
(2) Sold	NIL	NIL
(3) Disposed	920 MT	NIL

PART – F

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

Sl. No.	Waste type	Characteristics	Quantum (Stock available)	Disposal Method
Hazardous waste				

1.	ETP Sludge from wastewater treatment	<ul style="list-style-type: none">Bio-sludge: Oil content: 1-4 %Chemical Sludge & Oily sludge: <div><div><div>NUMALIGARH REFINERY LIMITED (Quality Control Department)</div></div><div>Analysis of Chemical and Oily sludge sample</div><table><tr><th>Date</th><th>SAMPLE SOURCE</th><th>PARAMETERS</th><th>RESULTS %wt</th></tr><tr><td rowspan="15">14-11-2024 11:30 hrs</td><td rowspan="15">ETP (Chemical & Oily sludge)</td><td>Moisture Content</td><td>81.95</td></tr><tr><td>Oil Content</td><td>3.90</td></tr><tr><td>Organic & Volatile Matter</td><td>12.70</td></tr><tr><td>Iron</td><td>0.10</td></tr><tr><td>Sodium</td><td>0.03</td></tr><tr><td>Sulphide</td><td>0.32</td></tr><tr><td>Phenol</td><td>0.045</td></tr><tr><td>SiO₂</td><td>0.12</td></tr><tr><td>Chloride</td><td>0.09</td></tr><tr><td>Calcium</td><td>0.13</td></tr><tr><td>Magnesium</td><td>0.07</td></tr><tr><td>Manganese</td><td>0.004</td></tr><tr><td>Nickel</td><td>0.0015</td></tr><tr><td>Sulphate</td><td>0.55</td></tr><tr><td>Zinc</td><td>0.003</td></tr><tr><td>Lead</td><td>0.006</td></tr><tr><td>Copper</td><td>0.0002</td></tr><tr><td>Cobalt</td><td>0.0003</td></tr></table><div>Analysed By: Mr. Krishan Baruah Certified by: Dr. Bedobrat Barhail Sr. Officer (Quality Control)  बेदब्रत बारह/BE DOBRAT BARHAI सीनियर ऑफिसर (गुण नियंत्रण विभाग) एनएमएल लिमिटेड/Numaligarh Refinery Limited तेलवन: अरुण - 785 109 / Dibrugarh, Assam - 786 009</div></div>	Date	SAMPLE SOURCE	PARAMETERS	RESULTS %wt	14-11-2024 11:30 hrs	ETP (Chemical & Oily sludge)	Moisture Content	81.95	Oil Content	3.90	Organic & Volatile Matter	12.70	Iron	0.10	Sodium	0.03	Sulphide	0.32	Phenol	0.045	SiO ₂	0.12	Chloride	0.09	Calcium	0.13	Magnesium	0.07	Manganese	0.004	Nickel	0.0015	Sulphate	0.55	Zinc	0.003	Lead	0.006	Copper	0.0002	Cobalt	0.0003	0 MT	Chemical & Oily sludge and Bio Sludge which is generated at different sections of the Effluent Treatment Plant (ETP) are collected in a sludge thickener through a sludge collection system. Floating oil with water from the thickener is recycled back to the Inlet Receiving Sump (IRS) of ETP for further processing and oil recovery. The thickened sludge from the bottom of the thickener is taken to the centrifuge feed sump for feeding to the centrifuge for recovering the absorbed oil from it. By using the highly efficient centrifuge, almost total oil is recovered from the sludge and is recycled back to the slop oil system for reprocessing. The cake from the centrifuge is disposed of in the Secured Landfill (SLF) as and when generated. A Secured Landfill (SLF) with a capacity of 6000 m ³ has been constructed inside the Refinery Premises.
Date	SAMPLE SOURCE	PARAMETERS	RESULTS %wt																																											
14-11-2024 11:30 hrs	ETP (Chemical & Oily sludge)	Moisture Content	81.95																																											
		Oil Content	3.90																																											
		Organic & Volatile Matter	12.70																																											
		Iron	0.10																																											
		Sodium	0.03																																											
		Sulphide	0.32																																											
		Phenol	0.045																																											
		SiO ₂	0.12																																											
		Chloride	0.09																																											
		Calcium	0.13																																											
		Magnesium	0.07																																											
		Manganese	0.004																																											
		Nickel	0.0015																																											
		Sulphate	0.55																																											
		Zinc	0.003																																											
Lead	0.006																																													
Copper	0.0002																																													
Cobalt	0.0003																																													
2.	Tank Bottom Sludge	Oil content: 20-45%	2127.845 MT	Tank bottom sludge generally is sold to CPCB/SPCB -recognized recyclers. The same is also disposed of through Bioremediation more scientifically and efficiently in the Refinery premises itself. To cater to the requirement, two nos. Bioremediation facilities (1200 m ³ each) are available for bioremediation of Crude Tank cleaning sludge.																																										

3.	Spent Catalyst	Currently SRB spent catalyst (Alumina Claus catalyst) is available in stock.	3.22 MT	Spent catalysts are generally generated after a gap of 3/4 years when the catalyst is required to be replaced in the various units of the Refinery. After generation, the spent catalyst is kept in sealed drums at the demarcated place for onward selling to CPCB/SPCB-approved recyclers with due intimation to PCBA and following the stipulated guidelines/procedures. Spent catalysts are sold to CPCB/SPCB-authorized recyclers by following proper guidelines with intimation to SPCB.
4.	Slop oil	Oil content: 80 %	91192 MT	Slop oil is generated from the process units in the refinery and is stored in the Slop oil tanks under the Oil Movement & Storage Unit. Slop oil is also generated in ETP during the wastewater treatment processes and the same is recovered and transferred to OMS for further treatment and processing. The slop oil generated is treated in a 3-phase decanter system for efficient slop management of the refinery and is reprocessed in the CDU. Slop oil is also sold to CPCB/SPCB authorized recyclers.
5.	Used or Spent Oil (Spent Lube Oil)	Oil content: >90 %	12.591 MT	Spent lube oil is usually generated in the refinery during the maintenance activities of the various equipments and machinery operated in the process plants. The spent lube oil generated is kept in drums at demarcated locations and is sold off to CPCB/SPCB-approved recyclers as per guidelines.

6.	Empty barrels/containers contaminated with hazardous chemicals/wastes	-	3921 Nos	A lot of barrels/containers/drums are used in the refinery for the intermittent storage of hazardous waste/ chemicals/ oil and lubricants etc. The empty barrels that are generated post respective usages are kept in demarcated locations and are disposed of by selling the same to CPCB/SPCB-authorized recyclers.
Non-Hazardous solid waste				
1.	Incinerable solid waste	Paper waste	920 MT	Non-hazardous solid waste like- paper, hard boards, packing materials/papers, and cartons are collected from various locations of the refinery premises and stored in Solid waste collection yard. The same is then disposed through incineration process in Solid waste Incinerator package.

PART –G

Impact of the pollution abatement measures taken on the conservation of natural resources and the cost of production:

NRL has determined the sources of pollution in various activities focusing on pollution load. Company's management is very careful and proactive regarding the environmental impacts of the new initiatives and products. NRL is conducting the Environmental Impact Assessment study of every project to understand the implications of setting up any new project or unit. Significant contribution made by NRL on the specific contribution on innovative clean technology, sustainability, broader user or target groups in the following fields:

- a. Environment-friendly technology adopted for highly polluting industries.
- b. Innovativeness/creativity of clean technology.
- c. Any significant contribution towards the manufacture of environmentally friendly products.

- d. Abatement including reduction reuse, recycling, or any beneficial use of waste generated.
- e. Substantial and steady reduction in the effluents and emissions in the year.
- f. Success in defining environmental pollution needs meeting pollution prevention goals and overall improvements to the quality of air, water, and land.
- g. Reduction of risk to the community living in the vicinity of units handling hazardous chemicals.
- h. Sustainability of the developed environmentally friendly technology from financial, social, and ecological aspects.

As higher fuel consumption directly contributes to the higher emission of greenhouse gases affecting natural ecological processes, energy conservation efforts have received continuous focus at NRL since the conceptualization of the refinery by applying optimum consumption of fuel in furnaces thereby reducing the rate of emission of Green House Gases. It has adopted state-of-the-art energy efficient technology, high-efficiency furnaces with glass air pre-heaters, plate-type exchangers, installation of a captive co-generation power plant using a heat recovery system, maximization of waste heat recovery, installation and operation of power recovery turbine in the hydrocracker and other units, etc. NRL has adopted very advanced and comprehensive steps towards controlling pollution. From the very onset, the selection process of technologies and equipment was done with special care for environmental protection.

Details regarding some of the pollution abatement measures of NRL are as follows:

1. Water

1.1 Effluent Treatment Plant with the latest technology:

A centralized modern Effluent Treatment Plant having tertiary treatment facilities has been installed. Also, ETP includes a three-stage oil recovery system from wastewater and a high-efficiency centrifuge for recovering oil from the oily sludge. To avoid hazardous solid waste generation, a more environmentally friendly hydrogen peroxide treatment process has been introduced. Discharge of Treated Effluent from ETP via dedicated pipeline has been discontinued since October 2000 and discharge of effluents from Sewage Treatment Plant has been discontinued since April 2007. The treated effluent from NRL Township is diverted to the ETP inside the Refinery by implementing suitable modifications in the disposal line in ETP. The treated water from Township STP is received at the aeration tank. The outlet at Numaligarh Jetty in river Dhansiri has been blinded and the discharge from township STP also has been routed to ETP through the same line. About 60-70% of treated effluent is being

reused/recycled in miscellaneous refinery activities and as Firewater makeup and the rest quantity is system/operational losses in ETP due to various constraints. As a part of ETP modernization VOC recovery system has been also implemented.

1.2 Implementation of Hydrogen Peroxide Treatment

H₂O₂ treatment process has been introduced for the chemical treatment of wastewater in the ETP by replacing the conventional FeCl₃ process. The introduction of this technique has reduced the solid waste generation drastically.

1.3 Installation of oil catchers in the stormwater drains

Several oil catchers have been installed and hay filters, and oil absorbent booms are placed in the refinery stormwater system as a preventive measure to eliminate any possibility of oil being carried over to the outside environment. The storm water recycle project is being implemented for reuse.

2. Air:

2.1 Low Nox burners in Furnaces: All the furnaces are provided with ultra-low NOx burners.

2.2 Use of low sulfur fuel for the Refinery furnace: Sweet fuel gas, after removing sulfur in the Amine Treatment Unit of Sulphur Recovery Block (SRB) is used in the refinery furnaces.

2.3 High Stack Height: To reduce the ground-level concentration of pollutants, the height of stacks at different plants in the refinery is kept at 60 meters. Further, the height of the stack at the Coke Calcination Unit is kept at 77 meters.

2.4 Unique Ground Flare System: To avoid any adverse impact of the flare on wild animals in the Kaziranga National Park, a non-illuminating ground flare has been incorporated, which is the first of its kind in the country.

2.5 Sulfur Recovery Plant: Assam crude is sweet crude (only 0.26 % Sulfur content). Despite processing low-sulfur Assam crude, a Sulfur Recovery Unit (SRU) has been installed to remove sulfur from sour water and sour gas generated during the refining process. Subsequently, its capacity has been enhanced from 14.6 Tonnes Per Day to 19.3 Tonnes Per Day in the year 2010 commensurate with the Diesel Quality Upgradation Project. Implementation of a new train of Sulphur Recovery Unit (SRU) has been taken up for parallel execution to meet future environmental requirements along with the implementation of Tail Gas Treating Unit (TGTU). As a remarkable achievement, NRL successfully commissioned the Tail Gas Treating Unit (TGTU) in Feb'24, and sulphur recovery efficiency increased from the existing 96% to 99 %.

2.6 Installation of double mechanical seals in Floating roof tanks: In an effort towards controlling fugitive emission and vapor loss from hydrocarbon storage areas, double mechanical seals are being installed in floating roof tanks in the refinery & marketing terminal adjacent to the refinery.

2.7 Leak Detection and Repair (LDAR) Programme: Leak Detection and Repair (LDAR) Programme has been implemented in the refinery for detection of fugitive emissions.

2.8 Dust mitigation activities: 3 nos. of Mist Cannons are being utilized at project/construction sites as per requirement for control of dust pollution. Water sprinkling using tankers along major haul roads of the refinery is also being carried out. A wheel Washing system has been installed for vehicles exiting the Refinery Project gate for the control of dust pollution outside the refinery premises along with regular water sprinkling on the roads by tankers. Permanent water sprinkling arrangement has been installed in the Coke Calcination Unit (CCU) yard, and the installation of 2 mist cannons in the CCU yard has been completed to control fugitive dust emission from CCU.

2.9 Maximum product evacuation through pipeline: About 80% of the product evacuation takes place via NSPL (Numaligarh Siliguri Pipeline) thereby contributing as an initiative towards reducing vehicular traffic for product despatch.

2.10 Diversion of National Highway no.39: Diversion of National Highway no.39 running by the side of the refinery was done to an alternate route thereby reducing congestion and overcrowding of traffic.

2.11 Green Belt development: An ambitious plan of green belt development has been adopted around the refinery to serve as a barrier to air pollutants and noise. A 100m wide green belt around the refinery and 25 m wide around the marketing terminal covering 56 Ha of land has been developed, thereby rendering a perfectly natural barrier to the industrial noise, minor air pollutants from reaching the immediate surroundings, both human population, rich flora & fauna and help in mitigating the effects of fugitive emission in all around Refinery. There are green covers of tea gardens (tea bushes and shed trees) in the northern and southern boundary of the refinery with approx. 260 hectares, contiguous to the refinery Green Belt. The township situated about 5km from the refinery is spread over 250 acres area. Although the township is full of natural green vegetation, large nos. of trees have been planted on both sides of roads and other parts of the township. Initially plantation of around 1,25,000 nos of saplings of various species was carried in the Green Belt around Refinery and 20,000 nos in the Green Belt around NRMT. Massive plantations are being carried out every year in the Green Belt to increase the density of trees. Around 55900 saplings have been planted in the Green Belt area during 2000-2018. Plantation activities inside the Refinery as well as outside the refinery have been carried out in a phased manner considering weather conditions. The meticulously planned and developed green belt all around the refinery has now grown into rich foliage, rendering a perfectly natural barrier to the industrial noise and minor air pollutants from reaching the immediate surroundings, both the human population and the rich flora and fauna. NRL is aggressively pursuing tree plantation in the refinery area with a plantation of around 7000 saplings during 2018-2021. Plantation drives in nearby areas of the refinery are taken from time to time under various schemes & programmes.

Township environment: Keeping the environment as a prime concern, NRL has envisaged an ambitious experimental project for the first time in the country. This unique project called “Butterfly Eco System” located in the Refinery Township is an effort to give a natural habitat for butterflies to come, stay, and breed in their natural way. Also, a unique herbal garden of rare medicinal plants called “Smritibon” has been developed in the township. In addition, the plantation of various saplings has also been carried out on a wide scale all along the roadsides in the Township & the Butterfly Valley. More than 84% of green cover is maintained in the Township.

3. Waste

NRL has taken up a lot of advanced & innovative initiatives in the management of Waste generated in the refinery.

Management of various types of waste generated in the refinery is described below:

3.1 Chemical and Oily sludge/Bio-sludge: Chemical and Oily sludge/ Bio-sludge generated at different sections of Effluent Treatment plant are centrifuged in the highly efficient Centrifuge to further remove the oil content. After centrifuge, the cake is kept in sealed drums which are then disposed of in the Secured Landfill.

3.2 Tank Bottom Oily Sludge: Tank bottom sludge generally is sold to CPCB recognized recyclers. The same is also disposed of through Bioremediation more scientifically and efficiently in the Refinery premises itself. Cleaning of Tank bottom has been done by adopting modern tank cleaning methods using a Tricanter centrifuge system for maximum recovery of hydrocarbon from the sludge generated and reduced sludge generation.

3.3 Spent Catalyst: Spent catalysts are generally generated after a gap of 3/4 years and are sold to CPCB/SPCB recognized recyclers by following proper guidelines with intimation to SPCB.

3.4 Slop oil: The slop oil generated is treated in a three-phase decanter system for efficient slop management of the refinery and is reprocessed in the CDU.

3.5 Spent Lube oil: The spent lube oil generated is sold off to CPCB/SPCB approved recyclers as per guidelines.

3.6 Empty Contaminated Barrels: The empty barrels that are generated post respective usages are disposed of by selling the same to CPCB/SPCB authorized recyclers.

3.7 Registration on National Hazardous Waste Tracking System (NHWTS): NRL has also successfully registered in the NHWTS, an online portal developed by CPCB for tracking the generation, transformation, storage, recycling, utilization, and disposal of Hazardous Waste in the country.

3.8 Plastics waste: The plastic packaging waste like stretch films generated in the Wax slabbing unit is collected back by the respective vendors. NRL has received the Registration certificates for Brand Owner and Importer as per the Extended Producers Responsibility (EPR) regime under implementation in Plastic Waste Management Rules, 2016.

3.9 E-waste: The defective components of repaired machines are taken back by the contractors after replacement. Laptops have a buy-back company policy. Desktops are mostly reused in low-priority areas and donated through CSR. The balance minimum nos. are handed over to the warehouse for disposal through auction from time to time.

3.10 Used Batteries: Used batteries are disposed of through the manufacturers/ vendors as buy-back arrangements.

3.11 Non- Hazardous Solid waste management: NRL has installed a 200 kg/hr Solid waste Incinerator with air pollution control equipments for incineration of non- hazardous incinerable waste generated in the refinery

PART – H

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

1. Biodiversity and Afforestation Initiatives: NRL has taken up three major flagship initiatives for plantation under Afforestation Drive in degraded areas:

1.1 Nakkati Chapori, Golaghat: An MoU was signed on 14.09.2020 between NRL and Golaghat Social Forestry Division, Government of Assam, for the plantation of 1 lakh tree saplings (equivalent to 2200 Ton of CO₂ absorption per annum), towards compensatory afforestation of 40 Hectares of degraded land in Nakkati Chapori under Khumtai Revenue Circle of Golaghat. 90,000 saplings plantation has been completed as on date.

1.2 Kandoli Reserve Forest, Nagaon: An MoU was signed on 23rd August 2021 between NRL and Nagaon Forest Division, Govt. of Assam for compensatory afforestation of 35 Hectare land in Kandoli PRF under Nagaon Forest Division with a total budget of ₹1.97 Crore for the plantation of approx. 68000 tree saplings (equivalent to 1496 Ton of CO₂ absorption per annum). The progress of the plantation drive is highly satisfactory with the plantation target been already achieved at Kandoli PRF.

1.3 Abhoypur Village, Dibrugarh: In a significant development, NRL has also taken up its 3rd compensatory afforestation project in 28 Ha. land in Abhoypur Village, Dibrugarh District at a project cost of ₹ 2.2 crore by signing MoU with Dibrugarh Forest Division on 29.05.2024. Plantation target of 3,50,000 saplings (equivalent to approx. 7700 Tons of CO₂ absorption per annum) has been completed at the site.

1.4 Establishment of Bamboo Nurseries: As an initiative for mitigation of climate change and environment sustainability, NRL has undertaken a project for the development and construction of three Bamboo Nurseries in the state of Assam to generate 60 lakh saplings to be planted in 15,000 hectares of land area, which will create a carbon sink to fix 2.6 lakh ton CO₂ from the air per annum. MoU was signed between NRL and PCCF & HOFF, Assam on 23rd Jan'2023 for the establishment of the 3 nurseries of 5 ha. each at a project cost of ₹ 9 crore for the macro proliferation and nurture of tissue cultured Bamboo saplings which will be made available to the farmers in Assam and other neighbouring states. The primary hardened bamboo saplings for the nurseries are being supplied by M/s. Chroma Biotech, Dibrugarh.

1.5 Green Credit Programme: Under Green Credit Program (GCP), NRL has acquired a 55-hectare plantation block in Nawada District, Bihar. A total of 60,500 saplings will be planted on this site, contributing to an estimated annual sequestration of 1,300 tonnes of CO₂. The Green Credit Programme (GCP), launched by the Government of India and notified on 13.10.2023 market-based mechanism aimed at incentivizing voluntary environmental actions, with a particular focus initial phase. This initiative of NRL aligns with the objectives of GCP to encourage eco-restoration through the creation of a dynamic land bank accessible to various stakeholders for sustainable land development.

2. Secured Land Fill Facility : As per CPCB recommendations with the latest technic/scientific design, a Secured Landfill with capacity of around 6000 m³ is in operation in the Refinery premises to cater the needs for disposal of Chemical & Oil Sludge.

3. **Bioremediation facility:** Two nos. of Bioremediation facilities (1200 m³) are available in the refinery for bioremediation of tank bottom oily sludge.
4. **Decanter System:** A three-phase decanter system has been commissioned for efficient slop management of the Refinery. About 50-70 KL of slop can be processed per day and the resultant processed slop can be directly transferred to the CDU unit for re-processing along with crude.
5. **Phycoremediation Pilot project:** NRL has also taken up a pilot project for the treatment of 100 kg of oily sludge with Delhi Research Implementation and Innovation (DRIIV) using the Phycoremediation technology developed by M/s Trinity International in January 2025. The project is under advanced stages of progress as on 31st March'25.
6. **Flare Gas Recovery System:** Numaligarh Refinery was originally designed with a twin flare system i.e., the ground flare and the elevated flare to avoid any adverse impact of the illumination of flare on animals and migratory birds in the surrounding wildlife sanctuaries and protected forest including Kaziranga National Park. In normal operation, the ground flare is in line and only the pilot burner is lit up in the elevated flare. The elevated flare caters to the load during plant emergencies when the flare load is very high or during maintenance of the ground flare system. As a measure for the further protection of the environment & conservation of energy, the Flare Gas Recovery System has been implemented to recover and reuse the excess gas going to the flare. The flare Gas Recovery System (FGRS) supplied by M/s Garo SPA, Italy was successfully commissioned in the year 2018-19. Implementation of the Flare Gas Recovery System has not only reduced specific energy consumption of the refinery but has also reduced Greenhouse gas emissions.
7. **Installation of Ambient Air Quality Monitoring Station (CAAQMS):** To monitor ambient air quality, 5 Nos. manual Ambient air quality monitoring stations (AAQMS) have been installed including one in Kaziranga National Park. 2 Nos. Continuous Ambient air quality monitoring stations (CAAQMS) have also been installed within the refinery premises. Another CAAQMS is being planned to be installed as a part of NREP activities. Initiative has been also taken for the installation of 2 Nos. CAAQMS at outside refinery premises and near Kaziranga.
8. **CDM Projects:** NRL has installed a 12.0 MW Steam Turbine Generator (STG) to utilize and recover waste (thermal/pressure) energy of HP steam. This project has been registered as a CDM Project and NRL has earned Carbon Emission Reductions (CERs) from UNFCCC.

- 9. Fuel switch over:** NRL has entered a JV with Oil India Ltd (OIL) and Assam Gas Company Ltd (AGCL) to form the Duliajan Numaligarh Pipeline (DNPL) who laid a 192 KM pipeline from Duliajan to Numaligarh to supply Natural Gas (NG) which is currently used at Captive Power Plant (CPP) and Hydrogen Unit of NRL instead of Naptha. This has resulted in the reduction of carbon emissions.
- 10. Transmission of online real-time data:** Transmission of online real-time data with remote alert facility for SO₂, NO_x, CO, PM, and Ambient Air quality to CPCB server has been implemented. As per directions of CPCB, online transmission of Treated effluent data for four parameters i.e. pH, TSS, BOD, COD, and flow have been implemented.
- 11. Estimation of Carbon Footprint and Green House Gas Emission:** NRL is focusing on energy efficiency and building carbon sink to minimize GHG emission and achievement of NET ZERO by 2038. NRL continues to monitor Green House Gas emission and get it validated through an accredited agency. Company commissioned TUV India Private Limited to conduct the independent assurance of Refinery's GHG emission, which includes "limited level of assurance" of NRL direct and other indirect (Scope 1 and 3, there are no Scope 2 emissions presently) GHG emission. This assurance engagement has been conducted against the methodology & standards of API compendium 2021, ISO 14064, GHG protocol ISAE 3000 (revised), and ISAE 3410 (GHGs) for verification process under the operational control approach. GHG emission stands at 0.699 and 0.840 Million ton CO₂ equivalent during FY 2023-24 & FY2022-23 respectively against crude processed of 2.510 MMTPA and 3.091 MMTPA respectively.
- 12. Despatch of Ethanol Blended Motor Spirit:** NRL has commenced despatch of Ethanol Blended Motor Spirit (EBMS) from its Marketing Terminal in Numaligarh for supply to Retail Outlets located in North-East India. The first tank truck loaded with EBMS was despatched on 03-03-2022 from Numaligarh Refinery Marketing Terminal to be sold through BPCL Retail Outlet. This augurs well with the Govt of India's target to achieve 20% blending of Ethanol with MS (Petrol) by 2025.

India imports 85% of its crude oil requirement. Ethanol, produced domestically, blending in Motor Spirit (Petrol) assumes significance at a time when the Govt. of India is focused on reducing import dependence, thereby saving on foreign exchange while promoting green energy. Also, ethanol is a less polluting fuel and offers equivalent efficiency at a lower cost as compared to MS (Petrol).

NRL has recently commissioned 2 above-ground tanks of capacity 860 KL each, through its subsidiary ABRPL, along with modification of existing truck loading gantry facilities to enable online blending of Ethanol in required proportion before it is

dispatched to its customers. NRL's joint venture company, M/s Assam Bio-Refinery Pvt. Ltd. which is executing the first 2G biorefinery with bamboo mass as feedstock and bioethanol as one of the products is all set to be commissioned in the latter part of this year, which will substantially cater to the ethanol requirement in the Northeast region and beyond.

PART – I

Any other particulars for improving the quality of the environment:

1. As a part of continuous efforts towards reduction of emissions, Numaligarh Refinery produces ultra –low sulphur High Speed Diesel and motor spirit having less than 0.001% (10ppm) sulphur conforming to the Euro-VI Specifications. This contributes to reducing pollution from diesel and petrol vehicles due to the reduction in emission of Sulphur dioxide into the atmosphere.

Numaligarh Refinery Limited (NRL) has upgraded its refinery for production of BS-VI HSD to meet product quality requirements as per the Auto Fuel Policy of the Government of India by the implementation of the Diesel Hydro Treater Project (DHDT), which was commissioned in January 2018. NRL has also increased the capacity of its MS plant by 50% in 2019 and the entire quantity of MS produced meets BS VI standards.

As an advanced step towards environment protection, NRL has installed four mounded Bullets which are more environmentally friendly and safe for the storage of LPG replacing the existing LPG spheres.

2. Energy conservation measures:

NRL actively focuses on conserving energy by closely monitoring the Energy Performance Indicators (EnPI) for each unit. The Specific Energy Consumption (SEC) was 61.47 MBN and Energy Intensity Index (EII) was 81.09 against target of 61.5 and 81.5 respectively for FY 2024-25. Numaligarh Refinery also boasts a 1.05 MW solar photovoltaic capacity, which accounts for 0.4% of its total captive power generation. This solar energy generated is 828.7 MWh in 2024-25, effectively reducing emissions by approximately 467 MTPA CO₂e. For additional solar power, M/s NTPC Vidyut Vyapar Nigam Ltd. (NVVN) has been engaged as Project Management Consultant (PMC) under CAPEX mode for a solar generation potential of approximately 1.2 MW across various identified locations of NRL under the PM Surya Ghar: Muft Bijli Yojana scheme.

2.1 Energy Efficiency Improvement Measures during the year FY'2024-25:

- VDU heater pigging was carried out in August'24 which improves heater operating parameters with significant fuel saving.
- Condensate recovery system through steam traps routed to CPP was commissioned in Sulphur Recovery unit.
- Online digital twin model implemented in preheat circuit of CDU/VDU. The output of the simulation twin model enabled optimal use of energy in the heater.
- Ensuring Steam trap performance rate at >98% in working condition. Tail Gas treating unit which improves the Sulphur recovery efficiency from 96.0% to 99.9% with additional production of sulphur of around 4% and reduce mass loss in terms of sulphur. Moreover, TGTU resulted in significant reduction in SO₂ emission from 6000 ppm to 100-300 ppm.

2.2 Other Highlights:

- Joint Furnace efficiency survey conducted by CHT nominated refinery experts has been successfully completed in February 2025.
- Base line (FY'2023-24) study of CCTS (Carbon Credit & Trading Scheme) was conducted in coordination with BEE coordination along with CII accredited energy auditors in December 2024.
- NRL procured 8225 nos. of Renewable Energy Certificate (RECs) on PXIL trading platform to comply Renewable Consumption Obligation (RCO) for period FY'2024-25 (Q-1, 2 & 3) under CPP owner category.

3. Technology Absorption, Adaptation and Innovation measures:

3.1 Numaligarh Refinery Expansion Project (NREP): NRL is in the process of augmenting its refining capacity from 3.0 MMTPA to 9.0 MMTPA, by setting up a new refinery train of 6.0 MMTPA in the existing premises. The project is being executed using a mixed implementation model engaging a combination of PMC, EPC, EPCM, and other supporting consultants. The Hydrogen Generation Unit will be set up in "JOB WORK" mode. Delivery of Process Package, including engineering for all the units are completed. Overall project progress made as on 31.05.2025 is 78%. Noteworthy technologies adopted are PFCC unit for high yield of Propylene and Ebullated Bed Resid Hydrocracker (RPTU) for bottom upgradation. Capacity expansion of NRL from 3.0 MMTPA to 9.0 MMTPA will ensure additional availability of petroleum products primarily LPG, MS and HSD in the NE and

Eastern region of India and meet the growing energy demand in the region. Additionally, NRL will also export HSD to Bangladesh through the Indo Bangla Friendship Pipeline (IBFPL) commissioned during March 2023.

3.2 Bio-Refinery Project : NRL is setting up a 49 TMTPA Bio Refinery project as a joint venture company promoted by NRL with 50% equity and a balance of 50% by Fortum 3. B.V Netherland and Chempolis Oy, Finland for producing ethanol from cellulosic feedstock 'Bamboo'. The process to produce bioethanol from bamboobiomass is based on the Formicobio Technology from M/s Chempolis. Overall progress of the project is 99.5% as on 15.05.2025. Bio-Ethanol production from the Bio- Refinery shall be used in blending with Motor Spirit by North-East refineries. Bio Refinery project will help in meeting the 20% Ethanol Blended Petrol (EBP20) programme of GOI's National Biofuel Policy by 2023-24 which will in turn help to strengthen the country's energy security, enable local enterprises and farmers to participate in the energy economy and reduce vehicular emissions.

3.3 Wax Pastillation Unit: NRL has commissioned a new Wax Pastillation Unit (WPU) during March 2023 with a production capacity of 144TPD. M/s IPCO, Germany is the technology provider and process licensor of the WPU. The technology involves an efficient and cost- effective process, in which molten liquid wax is converted into pastille form (5 to 6mm size). Pallet Wax from Wax Pastillation Unit will cater to additional demand from customers and will enhance flexibility in marketing of Paraffin Wax. This plant will also improve capacity utilization of Wax block as existing ASPU is sensitive to maintenance.

3.4 Aq. Ammonia Project: NRL is setting up an Aqueous Ammonia plant to meet 10 TPD Aq. Ammonia requirement in Bio-refinery to maintain pH for proper performance of enzymes. It is noteworthy that NRL is going to produce Aq. NH₃(25%) from a waste NH₃ rich stream of sour water stripper utilizing technology that is developed jointly by NRL & EIL. Its target completion is in March, 2026. Aq. Ammonia 25% (NH₃) production will reduce NOX generation from refinery. Moreover, this project will convert waste to value added by product.

3.5 Tail Gas Treating Unit (TGTU): TGTU was successfully commissioned on 15th February 2024. TGTU technology with the trade name Eng SulfTG® is developed by EIL to effectively remove sulfur by recycling the unreacted sulfur components like H₂S, SO₂, COS, & Sulphur by converting to H₂S in Hydrogenator & recovering as Sulphur in the Claus section in Sulphur Recovery Unit (SRU). Claus process integrated with Tail gas treating unit (TGTU) is designed based on EngSulfTG® technology and can result in 99.9% removal of sulfur from acid gas & sour gas coming from amine regeneration & Sour water stripper units in refinery. This technology is also adopted in the NREP SRU. With the commissioning of TGTU, SO₂ emission of SRU has significantly decreased from 6000 ppm without TGTU to 100-300 ppm with TGTU. Accordingly, the Sulphur recovery efficiency has improved from 96.0% to 99.9% with additional production of sulphur of around 4 % & it has added to NRL's continuous endeavor towards a safe and clean environment.

3.6 Green Hydrogen: NRL has been playing a pivotal role amongst the Indian PSU to meet the Green Hydrogen Consumption Obligation (GHCO) as per the Govt. of India mandate. Green Hydrogen offers a renewable energy-based alternative for meeting Hydrogen requirements in fertilizer production and petroleum refining. This has the potential to reduce the country's dependency on fossil fuels, energy security, and a step towards achieving the Net Zero goal. NRL is setting up a 2.4 KTPA (16 MW) Alkaline Electrolyzer (AEL) to produce 300 Kg per hour of Green Hydrogen. The project is awarded to M/s Greenko ZeroC for implementation with Electrolyzer to be supplied by M/s John Cockril, Belgium. NRL will meet 5% of GHCO by 2025-26 after commissioning of the project. NRL also floated a tender in May'2025 for setting up a 10 KTPA GH₂ plant under SIGHT 2B scheme of MNRE & MOPNG. The plant will be set up under Build Own and Operate (BOO) model. Green Hydrogen is a renewable energy alternative for meeting Hydrogen requirements in the refinery. This has the potential to reduce the country's dependency on fossil fuels, energy security and a step towards achieving the Net Zero goal.

3.7 Proposed Polypropylene Unit (PPU): In line with NRL's future petrochemical roadmap, a 360 KTPA Polypropylene Unit (PPU) project is planned to be implemented. It will receive Propylene feedstock from a high severity Petro-FCC unit being set up under NREP. M/s Lummus Novolen GMBH, Germany, is the process licensor for the proposed Polypropylene unit producing 360 KTPA Homopolymer grade Polypropylene. Basic Engineering Design Package for the unit is already completed. Environmental clearance for the Project was obtained in August 2024 and subsequently order was placed with M/S Engineers India Limited (EIL) engaging as EPCM consultant in the of Mar'2025. This proposed PPU project is being implemented inside existing NRL site at Numaligarh and its contractual completion is March'2028 which is 36 months from the date of placement of order to M/s. EIL. Considering the impressive growth of polypropylene in the domestic market, the 360 KTPA Polypropylene unit will help NRL to venture into the petrochemical market. Post implementation of the PPU project, NRL's Petrochemical Intensity Index (PII) which is a measure of the proportion of Petrochemical product produced out of the refinery throughput, will elevate from zero to 3.9. Addition of PPU is also expected to enhance NRL's Gross Refinery Margin (GRM) by ~ 1\$ per barrel.

3.8 Initiative for solar power: In its pursuit of tapping new and renewable energy sources, a slew of initiatives has been taken up to utilize solar energy in the refinery and the township premises. 1000KWp Solar PV panel installed in all non-critical building rooftops inside the refinery in 2017-18. Also installed 20KW solar rooftop PV panels adjacent to the NRL marketing terminal. NRL has replaced conventional streetlights with solar-powered lights in several places in its township. NRL is extending its solar power initiative for the benefit of the nearby community, solar panels have been installed in nos. of nearby schools. In its foray into renewable energy, NRL has taken the initiative to install a 50 KW Solar power plant on the rooftop of the Corporate Office Building in Guwahati.

4. Research and Development (R&D) Activities: Numaligarh Refinery Limited (NRL) has been actively pursuing targeted R&D initiatives through collaborations with premier academic and research institutions. These partnerships aim to advance technological excellence across refinery operations, develop innovative value-added products, and enhance the quality of existing petroleum offerings in line with NRL's strategic and sustainability objectives. Below is a summary of key research collaborations and ongoing R&D initiatives:

4.1 NRL Centre of Excellence for Sustainable Materials at IIT Guwahati

4.1.1 Development of Sustainable Materials

- **Biodegradable Packaging:** A project titled “Development of Biodegradable Plastics from Oil and Bio-Refinery Streams” is underway to convert furfural (a bio-refinery by-product) into Polycaprolactone for moulding into eco-friendly packaging materials.
- **Green Activated Carbon Production:** Aimed at circular economy solutions, a demonstration scale project for converting 5 MT/batch of waste bamboo dust into marketable grade green activated carbon is in progress.

4.1.2 Carbon Neutrality

- **“H₂ Separation and CO₂ Capture from PSA Off- Gas”:** This project seeks to integrate Liquid Piston Compression, Metal Hydride, and Membrane Technologies for hydrogen recovery and CO₂ capture, aligning with NRL's decarbonization roadmap.

4.1.3 Business Process Automation

- **“AI-Based Procurement RFX Automation”:** In collaboration with IIT Guwahati, this initiative aims to digitize and streamline procurement workflows while ensuring compliance with Government of India procurement norms.

4.2 NRL-CSIR NEIST R&D Centre, Jorhat: Research themes include:

- Development of **nanocomposite membrane** for CO₂ capture
- **Hybrid nano-catalysts** for green hydrogen production

- **Graphene-like nanomaterials** from petroleum waste
- **Multienzyme production** for bamboo-based bio-refinery applications

4.3 Wind Energy Resource Assessment: In partnership with Assam Kaziranga University and the Institute of Frontier Science and Application, NRL is supporting a study on “Assessment of Wind Energy Potential in Northeast India.” Two LIDAR units have been deployed across riverine sites in the Brahmaputra Valley to collect high-frequency wind data at turbine height. This bankable data will support future wind energy project feasibility in the region.

4.4 Waste to Wealth – Phenol Recovery: In collaboration with CSIR-NEIST, a project titled “Removal of Phenol from Sour and Stripped Water for Reuse and Value Addition” is in progress. Lab-scale studies with 50L batches using hollow fiber membrane modules were successfully conducted. A 1 m³/hr pilot unit is now under development for installation at NRL to reduce water footprint and recover value-added chemicals.

4.5 Refinery Waste Management Using Cyanobacteria: A project in collaboration with St. Edmund’s College, Shillong, focuses on bioremediation of refinery waste using cyanobacteria. It targets crude oil, tank bottom sludge, and ETP hydrocarbon sludge. After 28-day treatment cycles, the Total Petroleum Hydrocarbon (TPH) content was reduced to near zero in test samples, demonstrating significant potential for sustainable waste treatment.

4.6 R&D Projects with Rajiv Gandhi Institute of Petroleum Technology (RGPT), Amethi: A Memorandum of Agreement was signed on 13.11.2024 for the following projects:

- **Electrocatalytic conversion** of H₂S and NH₃ in sour water into Sulfur, Hydrogen, and Ammonium Sulphate
- **Methanol-diesel blending** for fuel stability
- **Lignin-based bio-adhesives** and process optimization
- **Electrochemical conversion** of ethanol-water into acetic acid and hydrogen
- **Development of corrosion inhibitors** for methanol-blended diesel systems. These strategic R&D engagements reflect NRL’s commitment to innovation, sustainability, and process excellence. They play a crucial role in driving long-term.

(ENVIRONMENT PERFORMANCE REPORT DURING FY (2024-25))[Online Stack Analyser data](#)

UNIT	FURNACE STACK	PARAMETER	OBSERVED VALUE in mg/Nm3			Limiting Concentration in mg/Nm3	Remarks
			MAX.	MIN.	AVG		
CDU/VDU	FF-01/02	SO2	584.93	6.84	192.79	768	Stack with dual firing (FG:FO=56:44)
		NOx	188.88	19.10	143.61	394	
		CO	7.07	2.35	4.90	172	
		PM	42.43	7.01	16.71	49	
DCU	FF-01	SO2	372.03	11.55	164.22	873	Stack with dual firing (FG:FO=50:50)
		NOx	190.03	25.00	145.80	400	
		CO	2.90	0.03	0.84	175	
		PM	52.56	5.15	7.19	55	
HCU	FF-01/02	SO2	49.60	1.28	15.63	50	Stack with Gas firing
		NOx	133.50	7.44	33.00	350	
		CO	36.53	5.22	11.85	150	
		PM	9.95	2.15	5.28	10	
HCU	FF-03	SO2	177.41	0.43	32.36	179	Stack with dual firing (FG:FO=92:08)
		NOx	71.70	0.45	28.64	358	
		CO	87.71	8.46	21.05	154	
		PM	7.17	3.79	4.81	17	
H2U	FF-01	SO2	49.89	16.60	35.00	50	Stack with Gas firing
		NOx	93.79	2.68	36.63	350	
		CO	18.86	2.11	6.93	150	
		PM	9.53	3.00	4.88	10	
CPP(HRSG)		SO2	49.72	22.77	37.04	50	Stack with Gas firing
		NOx	212.00	0.06	63.64	350	
		CO	53.52	0.10	8.69	150	
		PM	7.72	0.00	2.65	10	
CPP (UB)		SO2	49.57	12.33	36.80	50	Stack with dual firing (FG:FO=100:0)
		NOx	182.47	0.89	75.76	350	
		CO	15.21	0.10	2.34	150	
		PM	9.60	5.25	7.49	10	
MSP (CRU)		SO2	49.13	1.15	13.75	50	Stack with Gas firing
		NOx	65.02	9.67	45.56	350	
		CO	3.41	0.51	1.67	150	
		PM	8.95	4.24	6.64	10	
MSP (NHTU)		SO2	36.67	3.27	11.15	50	Stack with Gas firing
		NOx	51.32	3.96	35.48	350	
		CO	9.06	0.53	2.57	150	
		PM	8.95	4.24	6.64	10	

DHDT	SO2	47.85	0.00	10.02	50	Stack with Gas firing
	NOx	107.67	0.00	27.22	250	
	CO	70.22	0.00	3.64	100	
	PM	0.81	0.71	0.76	5	
CCU	SO2	61.00	1.02	28.63	300	Stack with Gas firing
	NOx	128.19	11.53	39.50	-	
	CO	30.86	1.88	17.27	-	
	PM	42.79	22.77	30.71	150	
SRU	NOx	29	26	22	250.00	Incinerator Stack
	CO	8.40	0.01	1.63	100.00	
Limiting concentration of emission calculated as per MOEF notification on standard vide GSR-186 (E) dated 18th March, 2008.						

(ENVIRONMENT PERFORMANCE REPORT DURING FY : 2024-25)						
Ambient Air Quality Data						
STATION	PARAMETER	STD NAAQS-2009	Unit	OBSERVATIONS		
				MAX	MIN	AVG
REFINERY (WATCH TOWER NO. 6)	SO2	80 (24 hr avg.)	µg/m3	20.49	5.36	12.03
	NO2	80 (24 hr avg.)	µg/m3	17.54	6.17	11.85
	O3	100 (8 hr avg.)	µg/m3	17.95	4.2	10.84
	CO	2.000 (8 hr.avg.)	mg/m3	0.75	0.0	0.26
	NH3	400 (24 hr.avg.)	µg/m3	35.74	18.28	26.18
	PM 10	100 (24 hr.avg.)	µg/m3	66.48	31.38	50.01
	PM 2.5	60 (24 hr.avg.)	µg/m3	41.14	18.62	27.65
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.97	0.51	0.74
	BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	06 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
ECO-PARK IN NRL TOWNSHIP	SO2	80 (24 hr avg.)	µg/m3	20.74	6.08	11.62
	NO2	80 (24 hr avg.)	µg/m3	17.83	7.12	11.42
	O3	100 (8 hr avg.)	µg/m3	18.14	4.62	10.98
	CO	2.000 (8 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	29.84	15.29	22.86
	PM 10	100 (24 hr.avg.)	µg/m3	66.82	32.21	51.85
	PM 2.5	60 (24 hr.avg.)	µg/m3	36.42	16.16	26.41

	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC		mg/m3	0.94	0.51	0.73
	BaP	1.0 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6.0 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
RAW WATER INTAKE	SO2	80 (24 hr avg.)	µg/m3	18.63	5.10	10.98
	NO2	80 (24 hr avg.)	µg/m3	18.32	6.58	11.92
	O3	100 (8 hr avg.)	µg/m3	16.74	4.75	10.98
	CO	2.000 (8 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	30.34	11.23	21.26
	PM 10	100 (24 hr.avg.)	µg/m3	62.75	32.63	50.69
	PM 2.5	60 (24 hr.avg.)	µg/m3	43.26	16.46	26.68
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC		mg/m3	0.95	0.51	0.72
	BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	06 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
	SO2	80 (24 hr avg.)	µg/m3	18.34	5.78	11.44
	NO2	80 (24 hr avg.)	µg/m3	24.09	7.14	12.11
	O3	100 (8 hr avg.)	µg/m3	25.98	7.14	12.16
	CO	2.000 (8 hr.avg.)	mg/m3	0.87	0.52	0.65

NH-39 BYPASS	NH3	400 (24 hr.avg.)	µg/m3	34.58	17.33	24.63
	PM 10	100 (24 hr.avg.)	µg/m3	95.23	32.78	52.50
	PM 2.5	60 (24 hr.avg.)	µg/m3	56.00	16.58	29.40
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	1.59	0.49	0.75
	BaP	1	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
KAZIRANGA WILDLIFE SANCTUARY AT AGARTOLI	SO2	80 (24 hr avg.)	µg/m3	18.94	6.47	11.79
	NO2	80 (24 hr avg.)	µg/m3	20.00	6.78	11.38
	O3	100 (8 hr avg.)	µg/m3	17.85	4.37	11.25
	CO	2.000 (8 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	34.16	13.62	25.38
	PM 10	100 (24 hr.avg.)	µg/m3	69.78	33.43	49.90
	PM 2.5	60 (24 hr.avg.)	µg/m3	36.86	17.23	27.87
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.96	0.48	0.71
	BaP	1.0	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6.0	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00

All the parameters are found to be within limit

ANNEXURE-G

Charter on Corporate Responsibility for Environmental Protection (CREP) for Oil Refineries

AIR POLLUTION MANAGEMENT		
1.	All the refineries located in the critically polluted areas, identified by CPCB, will submit an action plan (within 6 months) for phase-wise reduction of SO ₂ emission from the present level.	<p>NRL is not located in the identified critically polluted areas (identified by CPCB). However, the following measures have been taken for the reduction of SO₂ emissions :</p> <ul style="list-style-type: none"> ▪ Internal Fuel Oil with very low sulphur and Sweet Fuel Gas (with <10 ppm H₂S) that is produced as a part of processing low sulphur Assam Crude is used as fuel in the furnaces of the refinery. ▪ In continuation towards emission reduction. SRU was incorporated with an increased capacity enhanced from 14.7 TPD to 19.3 TPD during 2009-10 to treat the additional sulphur from ultra-low sulphur fuel yield. ▪ Avg. SO₂ emission from the refinery during FY-24-25 is 61.5 kg/hr which is well below the permissible limit (256 Kg/hr).
2.	Future refineries will have Sulphur Recovery Unit (SRU) with minimum 99% efficiency.	TGTU(Tail gas treating unit) has been commissioned in NRL in Feb'24 due to which the sulphur recovery has increased from 96 % to 99%.
3.	To enhance the efficiency of SRUs in the existing refineries, an expert committee will be constituted to look into various aspects and suggest a road map within 6 months.	<p>As per MoEF notification dated 18th March'2008, the sulphur recovery efficiency for plant capacity of 5 to 20T/day should be 96% for the existing refinery.</p> <p>NRL SRU falls in the range of 5 to 20T/day plant capacity, efficiency has always remained above 96%.</p> <p>Now, with the commissioning of TGTU facilities, sulphur recovery efficiency has further increased to 99%.</p>
4.	With regard to NO _x emission, the new refineries/process units will install low NO _x burners. For retrofitting of low NO _x burners in existing units, the expert committee will suggest the strategies and action plan within 6 months including NO _x standard.	Low NO _x burners have been provided in all the existing process furnaces at the time of installation itself so as to maintain the Nox emission rate at minimum.

5.	The flare losses will be minimized and monitored regularly.	<p>The flare losses are regularly monitored and optimized. Regarding the same, following steps have been taken-</p> <ul style="list-style-type: none"> ▪ Checking of passing valves by acoustic leak detector is carried out on a regular basis and as per the requirement. In case of any passing/leak is observed the same is attended immediately to arrest the leakages. PSVs and Control valves are being checked on regular basis . ▪ Regular material balance is done for calculating losses. ▪ Stringent system for continuous monitoring of flare losses in every shift is in place. ▪ Flare gas recovery system has been commissioned in April, 2018 for recovery of flare gas and routing it through SRB and sweetening along with sour gas of SRB and diverted to the FG header(Fuel gas) for use in the furnaces.
6.	Refineries will install continuous emission monitoring systems for SO _x and NO _x in major stacks with proper calibration facilities. Action plan for this will be submitted within 6 months.	<ul style="list-style-type: none"> ▪ Online stack analyzers for continuous monitoring of SO₂ ,NO_x, CO & PM have been provided in all the stacks of the refinery. All the analyzers are calibrated as per schedule. ▪ Realtime emission data is being transmitted to the CPCB server on continuous basis. ▪ An LED Display Board for display of online stack monitoring data, ambient air monitoring data, treated effluent quality has been installed for public display at the main gate of refinery.

7.	<p>Refineries will also monitor total HC and Benzene in the premises (particularly at loading/un-loading operations and ETP). The status and action plan will be submitted within 6 months.</p> <p>The expert committee will also suggest an action plan, within 6 months, for control and monitoring of hydrocarbon loss & VOC emissions, leak detection and repair (LDAR) program and vapor recovery systems (for loading/un-loading operations within refineries only).</p>	<p>For monitoring and minimizing fugitive losses, the following measures have been taken :</p> <ul style="list-style-type: none"> ▪ Installation of Double Seals in IFRT and EFRT tanks in line with MoEF Notification dated 18th March'08 has been carried out. ▪ VOC recovery system has been implemented in ETP. ▪ Detection of VOC emissions and LDAR program is in place in the refinery. ▪ Strengthening / Maintaining of existing Green Belt is in practice. Massive plantation is being carried out in regular intervals to increase the density of trees. ▪ Monitoring of HC in the ambient air is being carried out regularly in all 5 AAQM stations. <p><u>*Benzene monitoring :</u> There is no benzene unit in NRL. However monitoring of benzene in ambient air is carried out as per NAAQS2009.</p>
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WASTEWATER MANAGEMENT

1.	<p>Refineries will prepare action plan for conservation of water resources and maximizing reuse/recycling of treated effluent within 6 months. The treated effluent discharge quantity (excluding once through cooling water) will be limited to 0.4 m³/per tonne of crude processed (for 90% of time) except for the monsoon season.</p>	<p>For conservation of water resources, the following measures were taken at the design stage itself to reduce the water consumption :</p> <ul style="list-style-type: none"> ▪ Using stripped sour water from SRU as coke cutting water and used in CCU for direct quenching of hot coke. ▪ Use of Crude & Vacuum column overhead sour water as desalter water. ▪ Use of Hydrocracker column overhead water in high pressure water injection system. ▪ Recovery of steam condensate to reduce the DM water intake. ▪ Provision of Air Cooling has been maximized. ▪ Extensive repairing of detected leakages in Firewater network is carried out as and when required. ▪ About 60-70% treated effluent is being reused/recycled in miscellaneous refinery activities and as Fire water makeup and rest quantity is system/operational losses in ETP due to various constraints. ▪ Rooftop rainwater harvesting systems of capacity 20 KL/Day at LPG bottling plant implemented. Roof top rainwater harvesting from a major building having
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		<p>huge potential is being planned and action has been initiated for the same.</p> <ul style="list-style-type: none"> ▪ Storm water recycling project is also being implemented in the refinery. ▪ Action has been initiated for achieving ZLD for the entire refinery.
2.	Oil spill response facilities at coastal refineries will be in position within 2 years. To facilitate this, MOEF will co-ordinate with Coast Guards, Port Trust and other departments.	<p>The same is not applicable, as the refinery is not located in coastal areas.</p> <p>However, Oil catchers/oil traps are installed in various locations in the stormwater channel to avoid any oil carryover to the open channel. Construction of 6 nos additional oil catcher completed. Additionally, NRL has installed a series of hay filers in the stormwater channel, and oil-absorbent booms are used as precautionary measures. Insignificant quantities of accidental oil spillage collected are recovered with the help of MOSRU (Mobile Oil Spill Recovery Unit).</p>

SOLID WASTE MANAGEMENT

1.	Refineries will explore new technologies for reduction in the generation of oily sludge. Strategy and action plan for liquidation of existing sludge will be submitted within 6 months.	<p>Sludge management system at NRL is as follows :</p> <ul style="list-style-type: none"> ▪ Modern Tank cleaning methods have been implemented to maximize recovery of oil from tank bottom sludge. Tank bottom oily sludge generated after oil recovery is disposed off either by bioremediation or selling to CPCB approved recycler. ▪ Chemical & Oily sludge of ETP is disposed off in the Secured Landfill facility. NRL has installed an SLF as per CPCB recommendation, having a capacity of 6000 m3. ▪ H₂O₂ treatment facility introduced to reduce the generation of sludge in ETP. NRL also installed nos of drum type groove skimmers in ETP for systematic removal of floating oil more efficiently and with better performance.
2.	The petroleum coke having high sulphur content will only be sold to/reused by organized industries (having consent from SPCBs), which have systems to control SO ₂ emissions. This will be ensured by June 2003.	<p>As only sweet Assam crude is processed by NRL, sulphur in the petroleum coke is in the range of 1-1.2%. NRL produce anode grade coke which is further calcined in coke calcination unit to produce Calcined Petroleum Coke(CPC). Petroleum coke is sold to SPCB/CPCB recognized industry those who have the valid Consent.</p>

BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB
Test Report

Issued To M/s Numaligarh Refinery Limited
 NRL Complex, Numaligarh
 Distt. Golaghat, Assam-785 699

ULR No.

TC148142500004968F

Test Report Date

02/08/2025

Customer Reference No.:

4600009200-SAR/14.08.2023

Sample Particulars

Nature of the Sample

: Ambient Noise

Date of Sampling

: 30/07/2025

Parameter Tested

: Noise Level, Leq dB (A)*

Instrument Used

: Sound Level Meter

Analysis Report

Sr. No.	Area	Location	Observed Value dB(A)		Standard dB(A)
			Day	Night	
1	CDU/VDU	Field Cabin (Inside)	57.2	55.1	92 for 6 hrs
2		Crude Booster Pump Area (A)	89.8	88.1	
3		Crude Booster (B)	Off	Off	
4	DCU	DCU Filled Cabin	58.2	55.5	
5		LPG Compressor	85.4	83.3	
6	HCU	Field Cabin (Inside)	61.1	57.7	
7		Near RGC Area	81.2	78.8	
8		Blast Proof Cabin	50.1	48.1	
9	H ₂ U	Field Cabin (Inside)	57.3	55.5	
10		PSA Area	94.4	93.2	
11	SRB	Field Cabin (Inside)	59.7	57.1	
12		Control Rooms	58.2	55.2	
13	OM&S	PH#1	84.5	82.4	90 for 8 hrs
14		PH#2	83.2	81.1	
15		PH#3	75.5	73.3	
16		PH#1 Field Cabin (Inside)	55.5	54.1	
17		PH#2 Field Cabin (Inside)	54.1	52.2	
18		PH#3 Field Cabin (Inside)	55.2	53.6	
19		Decanter (Equipment Area)	Off	Off	
20		Decanter (Field Cabin)	Off	Off	
21		FGRU	Off	Off	
22	CPP	Control Rooms	62.1	60.3	
23		Field Cabin (Inside)	56.2	54.8	
24		Instrumentation Room	60.1	58.7	
25		Air Compressor (Utility)	89.9	88.8	

Remark:

*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.



TC-14814

(AUTHORISED SIGNATORY)
 (RAVINDER MITTAL)

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BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

Test Report

Issued To M/s Numaligarh Refinery Limited
NRL Complex, Numaligarh
Distt. Golaghat, Assam-785 699

ULR No.

Test Report Date

TC148142500004968F

02/08/2025

Customer Reference No.: 4600009200-SAR/14.08.2023

Analysis Report

Sr. No.	Area	Location	Observed Value dB(A)		Standard dB(A)
			Day	Night	
26	CPP	Cabin (2)	60.2	57.4	90 for 8 hrs
27		Sound Prone Zone	85.5	84.1	
28		Cooling Tower (North Side)	86.6	83.3	92 for 6 hrs
29		Cooling Tower (South Side)	85.5	82.2	
30	DM Plant	Field Cabin (Inside)	63.3	60.1	90 for 8 hrs
31	FWPH	Control Rooms (Inside)	61.1	58.2	
32	ETP	ETP Pump (House) 5	88.8	85.5	
33		ETP Pump (House) 6	75.5	72.2	
34		Control Rooms (Inside)	58.4	55.5	
35	CCU	Control Rooms (Inside)	60.5	57.3	
36		Near BFW	76.6	74.1	
37		Near Air Blower	84.1	82.4	
38	MSP	MSP Filed Cabin	56.6	54.1	
39		Near Compressor House	77.2	76.3	
40		Near Furnace Area	74.4	72.2	
41	N2 Plant	Control Rooms (Inside)	62.1	59.7	
42		LP Compressor (27-KA0002A)	94.3	92.1	
43		LP Compressor (27-KA0002A)	94.2	92.2	
44	Wax (ASPU)	LP Compressor (27-KA0002B)	94.1	92.4	
45		Compressor (304- A)	87.2	85.5	
46		Compressor (304- B)	86.4	84.7	
47	Wax (SDU)	Office Cabin (ASPU)	64.1	61.7	
48		Field Cabin	54.3	52.0	

Remark:

*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.



TC-14814



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CORPORATE SOCIAL RESPONSIBILITY

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TC148142500004968F

02/08/2025

Customer Reference No.:

4600009200-SAR/14.08.2023

Analysis Report

Sr. No.	Area	Location	Observed Value dB(A)		Standard dB(A)
			Day	Night	
49	LPG Bottling Plant	Carousel	85.5	83.3	92 for 6 hrs
50		Unloading	84.7	82.1	
51		Sealing	82.2	80.3	
52		Loading	87.7	85.1	
53	DHDT	F. Cabin	54.3	52.2	90 for 8 hrs
54	WAX (Hydrofinishing)	F. Cabin(Plant Area-Hydro finishing)	62.2	58.8	
55	Wax Pastillation Unit	Wax Pastillation Unit	73.2	70.1	
56	Lab	Outside Lab Building	63.4	60.2	Day Time- 75
57		Near Laboratory	65.5	63.1	
58	IT Deptt.	Server Room	48.7	44.2	
59	ADM Building	Near AC Room	55.5	52.1	
60		Near ADM Building	69.9	67.6	
61	Watch Tower No.	Near W.T. No.1	63.2	61.1	Night Time- 70
62	Central Control Room	In front of CCR	64.4	61.1	
63	Flare Area	Near Flare Area	63.2	58.8	
64	VKNRL Hospital	Hospital Premises	64.7	62.2	
65	DPS	DPS Premises	61.1	59.9	

Remark:

*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.



NOTE: The laboratory accepts the responsibility for content of report. The results contained in this test report related only to the sample tested. Test report shall not be reproduced except in full, without written approval of the laboratory. This report is intended only for your guidance and not for legal purpose or for advertisement. This report shall not be reproduced except in full without the written approval of this organization. Samples will be destroyed after 30 days from the date of issue of test certificate unless otherwise specified. Any complaint about this report should be communicated in writing within 7 days of issue of this report. Total liability of Nitya Laboratories is limited to the amount only. If you have any complaint/feedback regarding the sample collection and test report, please send an email at info@nityalab.com and call at +91-191-2465597, +91-9873924093

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Annexure-II

QUARTERLY PERFORMANCE REPORT W.R.T ENVIRONMENTAL ASPECT.

DURING QUARTER I (APR-JUN'25)2025-26

Online Stack Analyser data

UNIT	FURNACE STACK	PARAMETER	OBSERVED VALUE in mg/Nm3			Limiting Concentration in mg/Nm3	Remarks
			MAX.	MIN.	AVG		
CDU/VDU	FF-01/02	SO2	253.59	66.31	183.71	800	Stack with dual firing (FG:FO=55:45)
		NOx	191.03	8.68	126.37	395	
		CO	8.42	1.32	4.30	173	
		PM	44.08	3.29	9.92	51	
DCU	FF-01	SO2	222.39	9.01	126.92	835	Stack with dual firing (FG:FO=52:48)
		NOx	176.08	0.08	106.01	398	
		CO	3.76	0.10	2.14	174	
		PM	35.48	4.99	8.45	53	
HCU	FF-01/02	SO2	48.69	4.33	26.96	50	Stack with Gas firing
		NOx	129.31	26.33	107.84	350	
		CO	50.97	22.17	29.59	150	
		PM	5.55	4.19	4.82	10	
HCU	FF-03	SO2	97.19	0.51	32.28	141	Stack with dual firing (FG:FO=94:06)
		NOx	113.02	17.43	58.74	356	
		CO	61.33	11.03	13.29	153	
		PM	6.95	4.03	4.88	15	
H2U	FF-01	SO2	49.36	19.51	36.14	50	Stack with Gas firing
		NOx	46.86	18.83	38.36	350	
		CO	23.25	2.98	7.00	150	
		PM	9.11	0.16	2.61	10	
CPP(HRSG)		SO2	47.70	13.87	25.10	50	Stack with Gas firing
		NOx	34.23	9.92	18.02	350	
		CO	19.25	2.13	7.22	150	
		PM	3.86	1.266	2.66	10	

CPP (UB)	SO2	47.26	9.36	23.14	50	Stack with dual firing
	NOx	98.52	16.66	51.72	350	
	CO	12.14	0.21	4.09	150	
	PM	5.59	4.35	4.96	10	
MSP (CRU)	SO2	47.53	0.94	9.32	50	Stack with Gas firing
	NOx	50.81	0.88	24.19	350	
	CO	4.66	0.79	2.43	150	
	PM	8.65	2.20	3.96	10	
MSP (NHTU)	SO2	45.49	1.67	17.60	50	Stack with Gas firing
	NOx	34.91	0.79	12.99	350	
	CO	3.58	0.54	2.11	150	
	PM	8.65	2.20	3.96	10	
DHD T	SO2	14.03	0.00	6.20	50	Stack with Gas firing
	NOx	61.30	4.18	38.04	250	
	CO	46.83	0.000	3.94	100	
	PM	0.80	0.72	0.76	5	
CCU	SO2	84.39	21.31	29.60	300	Stack with Gas firing
	NOx	37.98	13.39	22.10	-	
	CO	13.71	0.26	5.19	-	
	PM	22.51	21.00	21.24	150	

Limiting concentration of emission calculated as per MOEF notification on standard vide GSR-186 (E) dated 18th March, 2008.

QUARTERLY PERFORMANCE REPORT W.R.T ENVIRONMENTAL ASPECT.

DURING QUARTER II (JUL-SEP'25)2025-26

Online Stack Analyser data

UNIT	FURNACE STACK	PARAMETER	OBSERVED VALUE in mg/Nm3			Limiting Concentration in mg/Nm3	Remarks
			MAX.	MIN.	AVG		
CDU/VDU	FF-01/02	SO2	205.16	31.23	152.03	763	Stack with dual firing (FG:FO=57:43)
		NOx	185.18	17.87	136.22	393	
		CO	9.47	0.10	2.34	172	
		PM	9.21	2.99	4.58	49	
DCU	FF-01	SO2	217.82	54.47	123.86	592	Stack with dual firing (FG:FO=67:33)
		NOx	146.37	0.12	44.58	383	
		CO	40.26	0.00	4.82	166	
		PM	15.16	5.83	7.89	40	
HCU	FF-01/02	SO2	31.07	8.15	15.77	50	Stack with Gas firing
		NOx	115.66	80.65	104.28	350	
		CO	28.19	27.24	27.77	150	
		PM	6.46	4.91	5.68	10	
HCU	FF-03	SO2	36.40	2.00	24.04	150	Stack with dual firing (FG:FO=94:06)
		NOx	49.56	2.32	27.12	356	
		CO	20.59	11.28	11.90	153	
		PM	8.67	6.16	7.16	15	
H2U	FF-01	SO2	46.11	18.28	36.82	50	Stack with Gas firing
		NOx	42.15	18.93	32.74	350	
		CO	8.62	4.80	7.69	150	
		PM	5.17	1.71	3.43	10	
CPP(HRSG)		SO2	19.36	0.58	10.86	50	Stack with Gas firing
		NOx	66.72	5.99	33.11	350	
		CO	13.51	2.27	6.57	150	
		PM	7.17	2.630	4.18	10	

CPP (UB)	SO2	49.91	29.25	41.83	50	Stack with dual firing
	NOx	100.04	0.28	36.49	350	
	CO	6.22	1.86	3.23	150	
	PM	7.00	5.41	6.10	10	
MSP (CRU)	SO2	36.78	1.14	7.28	50	Stack with Gas firing
	NOx	42.80	23.84	37.22	350	
	CO	4.41	0.59	3.08	150	
	PM	6.65	4.01	5.45	10	
MSP (NHTU)	SO2	49.26	1.87	13.86	50	Stack with Gas firing
	NOx	55.97	0.85	32.13	350	
	CO	3.19	0.59	2.43	150	
	PM	6.65	4.01	5.45	10	
DHDT	SO2	11.17	0.00	4.12	50	Stack with Gas firing
	NOx	43.69	0.00	13.65	250	
	CO	4.00	0.000	1.37	100	
	PM	0.78	0.72	0.75	5	
SRU-II	CO	91.93	0.04	31.93	100	Incinerator Stack
CCU	SO2	75.33380556	25.79803037	46.69882293	300	Stack with Gas firing
	NOx	24.77091844	18.89077353	22.37143202	-	
	CO	18.5783921	0.2347196	9.525957308	-	
	PM	28.8169781	20.9176301	22.96824695	150	
Limiting concentration of emission calculated as per MOEF notification on standard vide GSR-186 (E) dated 18th March, 2008.						

Annexure-III

NUMALIGARH REFINERY LIMITED						
QUARTERLY PERFORMANCE WITH RESPECT TO ENVIRONMENTAL ASPECTS						
DURING QUARTER I (APR-JUN'25)2025-26						
Ambient Air Quality Data						
STATION	PARAMETER	STD NAAQS-2009	Unit	OBSERVATIONS		
				MAX	MIN	AVG.
REFINERY (WATCH TOWER NO. 6)	SO2	80 (24 hr avg.)	µg/m3	26.73	15.45	20.13
	NO2	80 (24 hr avg.)	µg/m3	19.36	12.56	16.01
	O3	180 (1 hr avg.)	µg/m3	17.48	10.3	14.61
	CO	4.000 (1 hr.avg.)	mg/m3	0.71	0.64	0.68
	NH3	400 (24 hr.avg.)	µg/m3	33.69	24.37	29.45
	PM 10	100 (24 hr.avg.)	µg/m3	69.41	53.12	60.19
	PM 2.5	60 (24 hr.avg.)	µg/m3	41.22	27.61	33.93
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.85	0.58	0.71
	BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	06 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
ECO-PARK IN NRL TOWNSHIP	SO2	80 (24 hr avg.)	µg/m3	24.74	14.73	19.38
	NO2	80 (24 hr avg.)	µg/m3	19.67	13.74	16.13
	O3	180 (1 hr avg.)	µg/m3	20.13	12.34	16.44
	CO	4.000 (1 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	29.66	23.47	26.96
	PM 10	100 (24 hr.avg.)	µg/m3	69.17	55.16	61.97
	PM 2.5	60 (24 hr.avg.)	µg/m3	38.62	21.41	30.89
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC		mg/m3	0.85	0.60	0.74

	BaP	1.0 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6.0 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
RAW WATER INTAKE	SO2	80 (24 hr avg.)	µg/m3	21.94	13.36	17.42
	NO2	80 (24 hr avg.)	µg/m3	21.42	11.36	15.91
	O3	180 (1 hr avg.)	µg/m3	19.35	12.63	15.75
	CO	4.000 (1 hr.avg.)	mg/m3	16.38	0.00	5.46
	NH3	400 (24 hr.avg.)	µg/m3	33.91	20.16	27.45
	PM 10	100 (24 hr.avg.)	µg/m3	66.32	53.31	60.21
	PM 2.5	60 (24 hr.avg.)	µg/m3	37.49	27.49	32.84
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC		mg/m3	0.85	0.66	0.75
	BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	06 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
NH-39 BYPASS	SO2	80 (24 hr avg.)	µg/m3	22.14	13.82	17.17
	NO2	80 (24 hr avg.)	µg/m3	20.61	13.76	16.82
	O3	180 (1 hr avg.)	µg/m3	20.39	12.74	16.04
	CO	4.000 (1 hr.avg.)	mg/m3	0.61	0.52	0.57
	NH3	400 (24 hr.avg.)	µg/m3	35.61	26.62	29.99
	PM 10	100 (24 hr.avg.)	µg/m3	70.48	29.86	62.67

KAZIRANGA WILDLIFE SANCTUARY AT AGARTOLI	PM 2.5	60 (24 hr.avg.)	µg/m3	39.27	26.73	34.77
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.88	0.59	0.73
	BaP	1	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
	SO2	80 (24 hr avg.)	µg/m3	20.63	12.07	16.87
	NO2	80 (24 hr avg.)	µg/m3	21.73	13.32	17.05
	O3	180 (1 hr avg.)	µg/m3	21.69	12.03	17.30
	CO	4.000 (1 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	33.75	25.13	29.51
	PM 10	100 (24 hr.avg.)	µg/m3	70.37	54.19	62.70
	PM 2.5	60 (24 hr.avg.)	µg/m3	38.96	24.58	32.37

BDL:Below Detection Level, All the parameters are found to be within limit

NUMALIGARH REFINERY LIMITED						
QUARTERLY PERFORMANCE WITH RESPECT TO ENVIRONMENTAL ASPECTS DURING QUARTER II(JULY-SEP'25)2025-26						
Ambient Air Quality Data						
STATION	PARAMETER	STD NAAQS-2009	Unit	OBSERVATIONS		
				MAX	MIN	AVG.
REFINERY (WATCH TOWER NO. 6)	SO2	80 (24 hr avg.)	µg/m3	20.14	12.52	16.38
	NO2	80 (24 hr avg.)	µg/m3	21.43	13.26	17.34
	O3	180 (1 hr avg.)	µg/m3	20.62	11.3	16.44
	CO	4.000 (1 hr.avg.)	mg/m3	0.64	0.50	0.58
	NH3	400 (24 hr.avg.)	µg/m3	28.63	20.12	24.32
	PM 10	100 (24 hr.avg.)	µg/m3	60.00	49.25	55.30
	PM 2.5	60 (24 hr.avg.)	µg/m3	35.58	25.63	29.82
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.87	0.51	0.70
	BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	06 (Annual)	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
ECO-PARK IN NRL TOWNSHIP	SO2	80 (24 hr avg.)	µg/m3	20.64	12.35	16.84
	NO2	80 (24 hr avg.)	µg/m3	21.51	15.22	18.10
	O3	180 (1 hr avg.)	µg/m3	20.78	15.47	17.97
	CO	4.000 (1 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	29.74	22.10	25.65
	PM 10	100 (24 hr.avg.)	µg/m3	61.52	50.12	56.47
	PM 2.5	60 (24 hr.avg.)	µg/m3	32.31	24.53	28.45
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC		mg/m3	0.81	0.57	0.69

NH-39 BYPASS		BaP	1.0 (Annual)	ng/m3	0.00	0.00	0.00
		Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
		As	6.0 (Annual)	ng/m3	0.00	0.00	0.00
		Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
	RAW WATER INTAKE	SO2	80 (24 hr avg.)	µg/m3	25.88	14.52	19.84
		NO2	80 (24 hr avg.)	µg/m3	21.05	13.85	18.00
		O3	180 (1 hr avg.)	µg/m3	22.61	14.16	18.50
		CO	4.000 (1 hr.avg.)	mg/m3	0.00	0.00	0.00
		NH3	400 (24 hr.avg.)	µg/m3	29.76	20.13	25.04
		PM 10	100 (24 hr.avg.)	µg/m3	60.36	51.66	56.17
		PM 2.5	60 (24 hr.avg.)	µg/m3	58.73	25.76	38.39
		Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
		HC		mg/m3	0.82	0.57	0.70
		BaP	01 (Annual)	ng/m3	0.00	0.00	0.00
		Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
		As	06 (Annual)	ng/m3	0.00	0.00	0.00
		Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
	NH-39 BYPASS	SO2	80 (24 hr avg.)	µg/m3	22.58	15.31	18.75
		NO2	80 (24 hr avg.)	µg/m3	21.43	14.96	18.50
		O3	180 (1 hr avg.)	µg/m3	23.35	15.31	18.64
		CO	4.000 (1 hr.avg.)	mg/m3	0.52	0.00	0.17
		NH3	400 (24 hr.avg.)	µg/m3	30.52	22.69	27.08
		PM 10	100 (24 hr.avg.)	µg/m3	63.79	55.42	59.54

KAZIRANGA WILDLIFE SANCTUARY AT AGARTOLI	PM 2.5	60 (24 hr.avg.)	µg/m3	35.46	24.71	30.88
	Benzene	05 (Annual)	µg/m3	0.00	0.00	0.00
	HC	-	mg/m3	0.85	0.57	24.48
	BaP	1	ng/m3	0.00	0.00	0.00
	Pb	1.0 (24 hr.avg.)	µg/m3	0.00	0.00	0.00
	As	6	ng/m3	0.00	0.00	0.00
	Ni	20 (Annual)	ng/m3	0.00	0.00	0.00
	SO2	80 (24 hr avg.)	µg/m3	22.09	14.59	18.30
	NO2	80 (24 hr avg.)	µg/m3	21.79	14.86	18.35
	O3	180 (1 hr avg.)	µg/m3	21.37	15.63	18.56
	CO	4.000 (1 hr.avg.)	mg/m3	0.00	0.00	0.00
	NH3	400 (24 hr.avg.)	µg/m3	29.67	20.57	24.99
	PM 10	100 (24 hr.avg.)	µg/m3	61.78	52.98	57.58
	PM 2.5	60 (24 hr.avg.)	µg/m3	35.86	25.99	29.88

BDL:Below Detection Level, All the parameters are found to be within limit

Annexure-IV

QUARTERLY PERFORMANCE REPORT W.R.T ENVIRONMENTAL ASPECT DURING QUARTER I (APR-JUN'25)2025-26

TABLE-1 LIQUID EFFLUENT POLLUTANT LEVEL -								
MONITORED VALUES in mg/lit.except pH						Limiting value for conc. (mg/l except for pH)	Quantum limit in Kg / 1000 MT of crude processed	
SL. NO	PARAMETERS	NO. OF OBS	MAX.	MIN.	AVG.		Actual	Standard
1	pH	92	8.2	6.8	7.6	6-8.5	-	-
2	OIL & GREASE	92	4.8	0.3	1.57	5	0.67	2.0
3	SULPHIDE	92	<0.1	<0.1	<0.1	0.5	<0.1	0.2
4	PHENOL	92	0.35	0.02	0.07	0.35	0.03	0.14
5	S. SOLID	92	20.0	1.0	8.72	20.0	3.71	8.0
6	COD	92	93.6	7.70	21.9	125.0	9.32	50.0
7	BOD3	92	15.0	2.1	7.68	15.0	3.27	6.0
8	CN	92	<0.02	<0.02	<0.02	0.2	<0.02	0.08
9	Ammonia as N	3	10.8	10.8	10.80	15.0	4.60	6.0
10	Cr (Hexavalent)	3	0	0	0.00	0.1	0.0000	0.04
11	Cr (Total)	3	0	0	0.000	2.0	0.0000	0.8
12	Pb	3	0	0	0.0000	0.1	0.0000	0.04
13	Zn	3	0.028	0.028	0.028	5.0	0.0119	2.0
14	Ni	3	0.001	0.001	0.001	1.0	0.0004	0.4
15	Cu	3	0	0	0.000	1.0	0.0000	0.4
16	Benzene	3	<0.1	<0.1	<0.1	0.1	<0.1	0.04
17	Benzo (a)- Pyrene	3	<0.2	<0.2	<0.2	0.2	<0.2	0.08
18	Hg	3	<0.01	<0.01	<0.01	0.01	<0.01	0.004
19	V	3	<0.2	<0.2	<0.2	0.2	<0.2	0.8
20	TKN	3	17.95	11.76	14.57	40.0	6.20	16.0
21	P	3	1.62	1.18	1.45	3.0	0.62	1.2

Limiting concentration of effluent is as per MoEF notification on standard vide GSR-186 (E)dated 18th March, 2008.

* BDL- Detectable Limit : 0.1 microgram/Litre

* Parameters from 9 to 21 are monitored once in a month as per CPCB norms

QUARTERLY PERFORMANCE REPORT W.R.T ENVIRONMENTAL ASPECT
DURING QUARTER II (JUL-SEP'25)2025-26

TABLE-1 LIQUID EFFLUENT POLLUTANT LEVEL -								
MONITORED VALUES in mg/lit.except pH								
SL. NO	PARAMETERS	NO. OF OBS	MAX.	MIN.	AVG.	Limiting value for conc. (mg/l except for pH)	Quantum limit in Kg / 1000 MT of crude processed	
							Actual	Standard
1	pH	92	8.5	6.2	7.4	6-8.5	-	-
2	OIL & GREASE	92	5.0	0.5	1.52	5	0.72	2.0
3	SULPHIDE	92	<0.1	<0.1	<0.1	0.5	<0.1	0.2
4	PHENOL	92	0.22	0.02	0.05	0.35	0.02	0.14
5	S. SOLID	92	17.2	1.2	6.71	20.0	3.20	8.0
6	COD	92	123.0	8.20	36.7	125.0	17.50	50.0
7	BOD3	92	15.0	0.5	5.29	15.0	2.53	6.0
8	CN	92	<0.02	<0.02	<0.02	0.2	<0.02	0.08
9	Ammonia as N	3	10.8	10.8	10.80	15.0	5.15	6.0
10	Cr (Hexavalent)	3	0	0	0.00	0.1	0.0000	0.04
11	Cr (Total)	3	0	0	0.000	2.0	0.0000	0.8
12	Pb	3	0	0	0.0000	0.1	0.0000	0.04
13	Zn	3	0.028	0.028	0.028	5.0	0.0134	2.0
14	Ni	3	0.001	0.001	0.001	1.0	0.0005	0.4
15	Cu	3	0	0	0.000	1.0	0.0000	0.4
16	Benzene	3	<0.1	<0.1	<0.1	0.1	<0.1	0.04
17	Benzo (a)- Pyrene	3	<0.2	<0.2	<0.2	0.2	<0.2	0.08
18	Hg	3	<0.01	<0.01	<0.01	0.01	<0.01	0.004
19	V	3	<0.2	<0.2	<0.2	0.2	<0.2	0.8
20	TKN	3	19.27	9.26	12.60	40.0	6.01	16.0
21	P	3	1.23	0.67	0.86	3.0	0.41	1.2

Limiting concentration of effluent is as per MoEF notification on standard vide GSR-186 (E)dated 18th March, 2008.

* BDL- Detectable Limit : 0.1 microgram/Litre

* Parameters from 9 to 21 are monitored once in a month as per CPCB norms



Annexure-V

Numaligarh Refinery Limited

(A Govt. of India Enterprises)

NRL Complex, Numaligarh, Distt. Golaghat, Assam, 785 699

Reports on Fugitive Emission Management (Leak Detection & Repair)



Study Period: July 2025

Prepared By



NITYA LABORATORIES

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Website: www.nityalab.com

LDAR (Fugitive Emission) Survey Report for Numaligarh Refinery Limited

Name of Client : M/s Numaligarh Refinery Limited

NRL Complex, Numaligarh,
Distt. Golaghat, Assam, 785 699, India

Name of Vendor : M/s Nitya Laboratories

Plot No.118, Church Road, Behind Kausik Vatika
Bhagat Singh Colony, Ballabgarh-121 004
Distt. Faridabad (Haryana) Delhi NCR, India

Nature of Job : Fugitive Emission Survey Report at Numaligarh Refinery Limited, NRL
Complex, Numaligarh, Distt. Golaghat, Assam, 785 699, India

Report Period : June 2025

FOR NITYA LABORATORIES

RAVINDER MITTAL

Head-Environmental Division

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Executive Summary

M/s Numaligarh Refinery Limited has intended to conduct the Fugitive Emission survey/Leak Detection and Repair (LDAR) program at its refinery Numaligarh, Assam. As a part of this program M/s Numaligarh Refinery Limited has awarded the contract to M/s Nitya Laboratories for conducting the LDAR survey for the period to 01/2025.

The LDAR Program at site included the detection, tagging and measurement of VOC emission from these identified points which included valves, pump seal, compressor & pressure relieve valves for the measurement of the period June 2025.

Plant Wise Summary of VOC

Sr. No.	Date of Monitoring	Unit	Total Nos of Points Monitored	Total Nos of Leakage	Total Leak (kg/hr)	Total Leak (kg/day)
1	09-06-2025	UNIT-MSP	1118	0	0	0
2	12-06-2025	UNIT-CDU/VDU	723	0	0	0
3	13-06-2025	UNIT -WAX /SDU-43-TT-CR-101-A-SERVICE MVCO	231	0	0	0
4	17-06-2025	UNIT -45-TT-FR-009-A-SERVICE NAPHTHA MS	65	0	0	0
5	17-06-2025	UNIT -45-TT-FR-009-C-SERVICE NAPHTHA MS	65	0	0	0
6	17-06-2025	UNIT -45-TT-FR-009-C-SERVICE NAPHTHA MS	65	0	0	0
7	17-06-2025	UNIT -45-TT-FR- 001-A-SERVICE MTBE	70	0	0	0
8	17-06-2025	UNIT -45-TT-FR- 001-B-SERVICE OB	70	0	0	0
9	01-07-2025	UNIT -45-TT-FR- 004-A-SERVICE MS	120	0	0	0
10	01-07-2025	UNIT -45-TT-FR- 004-B-SERVICE MS	120	0	0	0
11	01-07-2025	UNIT -45-TT-FR- 004-C-SERVICE MS	120	0	0	0
12	01-07-2025	UNIT -45-TT-FR- 005-A-SERVICE HSD	120	0	0	0
13	01-07-2025	UNIT -45-TT-FR- 005-B-SERVICE HSD	120	0	0	0
14	01-07-2025	UNIT -45-TT-FR- 005-C-SERVICE HSD	120	0	0	0
TOTAL			3127	0	0	0

Confirmatory Statement: The monitored values are within the limits as per CPCB Guidelines.

1.0 INTRODUCTION

The petroleum refinery industry has successfully reduced its emissions of non-methane volatile organic compounds (NMVOC), one of the precursors to surface level ozone formation, by focusing on reduced venting, vapour recovery and better storage controls. In order make further reductions, the industry is now focusing its efforts on the control of fugitive emissions (leaks)¹ which can contribute up to one third of the remaining site NMVOC emissions. Fugitive emissions are generated at plant components which are supposed to be leak-tight (like pump or compressor seals, valve packing, flanges, sample points, etc.). Whilst a typical site would have 50,000+ such components, only a few of these contribute to the bulk of fugitive emissions. Identifying these few leaks for repair is difficult and time consuming, as they are spread out over the entire site, including hard to access locations.

Methodologies are currently available to detect leaking equipment in so-called LDAR (Leak Detection and Repair) programs:

Method 21 uses a hydrocarbon ionisation detector; this methodology was developed by the US-EPA and was the first historically. It is a widely accepted method, key elements of which are adopted in the European Standard EN 15446:2008.

A fugitive emission monitoring project is typically conducted in following phases:

2.0 About LDAR: Leak Detection and Repair (LDAR) is a program implemented to comply with environmental regulations for reducing the fugitive emissions of targeted chemicals into the environment. Several standards such as *Maximum Achievable Control Technology* (MACT) standards, *New Source Performance Standards* (NSPS), *National Emissions Standards for Hazardous Air Pollutants* (NESHAP) and Central Pollution Control Board (CPCB) require the monitoring and reporting of these fugitive emissions from process equipment.

Process components of about 10000 points are monitored as LDAR and cover all the components in the process plant.

A typical chemical unit can emit some tons per year of VOCs from leaking equipment, such as valves, connectors, pumps, sampling connections, compressors, pressure relief devices and open-ended lines.

The environmental regulations are prescribed LDAR programs as a means of reducing emissions have very specific standards and applied to a monitoring and repair program. The LDAR study included the following protocols:

- Chemical streams that must be monitored
- Types of components (pumps, valves, connectors, etc.) to be monitored
- Measured concentration in PPM that indicates a leak
- Frequency of monitoring
- Method of monitoring
- Actions to be taken if a leak is discovered
- Length of time in which an initial attempt to repair the leak must be performed
- Length of time in which an effective repair of the leak must be made
- Actions that must be taken if a leak cannot be repaired within guidelines
- Record-keeping and reporting requirements

VOCs are contributed to the formation of ground level ozone. Many of the areas where Refineries are located do not meet the NAAQ standards for ozone. Ozone can be transported in the atmosphere and contribute to nonattainment in downwind areas.

Affected Sources: Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, flange and connector that contains or contacts a fluid or gas. that is exceeding more than 5000ppm of pump and compressor seals and 3000 ppm other components is an affected source.

Equipment Leak: A leak is defined as greater than or equal to 3,000 & 5000 ppmv as methane, for organic compounds, as determined by EPA Reference Method 21. Most of the emissions are from valves and connectors because these are most prevalent components and can number in the thousands. The major cause of emissions from valves and connectors is seal or gasket failure due to normal wear or improper maintenance. More than 90% of emissions from the leaking equipment with valves are being the most significant source. The open-ended lines and sampling connections account for as much as 5 – 10% of total VOC emissions from equipment leaks.

Minimum Requirements for an Acceptable Organic LDAR Program:

- Each affected source is screened initially using Method 21. Sources that are unsafe to monitor is not screened, but documentation is provided to substantiate the unsafe nature.
- Monthly visual inspections has to be performed by industry on each affected source for signs of leakage (e.g. dripping liquid, spraying, misting, clouding, ice formation, distinctive odors, etc.).
- Monitoring of each affected source is to be conducting quarterly using Method 21.

All potential leak points associated with a component must be identified and screened for leaks. The detected leaks by Method 21 test was tagged and repaired. The leak sources are measured after repair and the same is recorded.

3.0 METHODOLOGY OF THE STUDY:

Step 1: Preparation of LDAR project

- Information exchange meeting
- Project introduction
- Project scooping
- Coding & naming conventions
- Prepare technical information (medium, stream, drawings, ...)
- Stream composition
- YTD production time per stream
- Leak definition, repair definition and tag definition per stream
- Detection equipment to use

Step 2: Database preparation:

- Build site structure (unit - sections - drawings - streams)
- Prepare Basic data
- Prepare Customer data

Step 3: Source inventory:

- Project kick-off meeting
- Safety training
- Site visit
- Define monitoring routes
- Start inventory program
- Prepare monitoring phase

Step 4: Unit monitoring phase

- Prepare detection devices and gather relevant information
- Start monitoring program
- Regular status meetings
- Database update

Step 5: First repair attempt

- Prepare tightening lists (sources with leak-rate > repair definition)
- Guide mechanical/operator to leaking sources
- Perform on-line reparation
- Re-monitoring after repair attempt

Step 6: Reporting

- Consolidate all gathered data
- Prepare lessons learned
- Create LDAR report
- Detail list of all leaking sources
- Repair orders
- Equipment overview per EPA source
- Top leakers (in costs and losses)

- Sort on most leaking equipment (EPA sources)

Sampling Methodology:

Initial Screening: Screening tests must be conducted initially and include:

1. The type of affected source (e.g. pump, compressor, etc.).
2. Site specific ID of each affected source.
3. Date of the Method 21 test.
4. Type of Method 21 detector.
5. Calibration results of Method 21 detector.
6. Screening results in ppmv.

4.0 Volatile Organic Compounds (VOCs)

4.1. VOC Definition

To this study the term VOC is defined as “all products of which at least 20% m/m has a vapour pressure higher than 0.3 kPa at 20°C. For the petroleum industry this includes all light products and excludes kerosene and all higher (i.e., heavier) products”.

The streams concerned in these studies do not contain methane so strictly the study addresses non-methane volatile hydrocarbons (NMVOC).

4.1.1. Diffuse VOC Emissions

Diffuse VOC emission is defined by the Best Available Technique Reference Document for the Refining of Mineral Oil and Gas (REF BREF) to be:

“Non-channelled VOC emissions that are not released via specific emission points such as stacks. They can result from 'area' sources (e.g., tanks) or 'point' sources (e.g., pipe flanges)”

“Diffuse VOC emissions are emissions arising from direct contact of gaseous or liquid volatile organic compounds with the environment (atmosphere, under normal operating circumstances). These can result from:

- Inherent design of the equipment (e.g., uncovered oil/water separators);
- Operating conditions (e.g., non collected vent of a fixed roof tank during loading); or fugitive emission caused by an undesired gradual loss of tightness from a piece of equipment and a resulting leak. Fugitive emissions are a subset of diffuse emission.”

The focus of this report is on comparing two detection methods for fugitive emissions from point sources which typically make up between 20-50% of the overall refinery diffuse emissions. Emissions from point sources include leaks from components which are not fully sealed: pipe flanges, valve stems, pump and compressor seals, etc.

5.0 Leak Detection and Quantification Methods

5.1 Leak Detection and Leak Quantification

When discussing the monitoring and reporting of VOC emissions, three different purposes have to be taken into account: leak detection, identification and quantification. For the point sources considered in this report detection and identification are synonymous.

- ❖ Leak detection/identification: VOC instruments can be used for the VOC leak detection: e.g. flame ionisation detector. The number of leaks and a leak indication (e.g., measured concentration (screening value) are recorded.
- ❖ Leak quantification is the estimate of the number of VOCs emitted (i.e., t/a) for reporting and tracking purposes.

Leak Detection and Repair (LDAR) programmes have been put in place across Indian/European refineries in order to detect and reduce the VOC fugitive emissions. Although the main purpose of an LDAR program is to decrease VOC emission, leak quantification was added for reporting purposes and for tracking the long term progress.

5.2 Leak Detection Methods

Methodology is currently available to detect the emissions from leaking equipment:

Methodologies Based on Sniffing: the detection is done by drawing an air sample past a hydrocarbon ionisation detector to detect the VOC concentration in the vicinity of the leak source (called screening value). This methodology was first developed by the US Environmental Protection Agency (EPA) and is referred to as “Method 21”.

The European LDAR Standard EN 15446:2008 is a modified version of Method 21 where the frequency of the surveys and the leak repair threshold are not fixed but can be adapted based on analysis of the previous survey.

5.2.1 Sniffing Detection Instruments

Many different types of Sniffing analysers can be used to detect fugitive VOC emissions. The most common types are photo-ionization detectors (PID).

5.2.2 Photo-Ionisation Detectors

Ionization detectors operate by ionizing the gas sample and then measuring the charge (number of ions) produced. PIDs use ultraviolet light. The response of a PID can vary significantly with double bonded compounds. Therefore the PID is most commonly used in refinery LDAR surveys. PID analysers have to be calibrated for a hydrocarbon concentration of 100 PPM.

The Nitya Laboratories using the Honeywell International PV Make and model no. Mini RAE 3000+ having the range between 0.1 PPM to 15000 PPM.

5.3 Leak Quantification/Estimation Methods

Leak Emission Estimation Based on the Sniffing Techniques

The Sniffing technique involves placing a detecting instrument probe close to the surface of a piece of process equipment where there is the potential for a leak (e.g., at flange seal). The VOC concentration of the leak is

measured by moving the probe along the surface. The maximum instrument reading in ppm is recorded. This is referred to as the “screening value”. A record is also made of the type of equipment device (valve, flange, pump seal etc.). A leak is considered to occur when the screening value measured is above a given concentration (e.g., 15,000 ppmv). The leak definition criterion can vary from one site to another and is usually set in the environmental permit. Above that given concentration threshold, the equipment is identified as leaking and must be repaired. Components which give screening values below the leak definition are considered as non-leakers and repairs are not required.

This detection method requires every potential leaking point included in the database (a listing of all sources) to be surveyed and therefore this procedure is very expensive and labour-intensive.

The equipment to be monitored by Sniffing is listed in a database and is restricted to:

- ❖ Accessible points (e.g., not under insulation, able to be reached without scaffolding).
- ❖ The lines containing a light hydrocarbon (20% of the fluid m/m has a vapour pressure higher than 0.3 kPa at 20°C).

Standards for Equipment Leaks

- (1) Approach: Approach for controlling fugitive emissions from equipment leaks shall have proper selection, installation and maintenance of non-leaking or leak-tight equipment. Following initial testing after commissioning, the monitoring for leak detection is to be carried out as a permanent on-going Leak Detection and Repair (LDAR) programme. Finally detected leaks are to be repaired within an allowable timeframe.
- (2) Components to be Covered: Components that shall be covered under LDAR programme include (i) Block valves; (ii) Control valves; (iii) Pump seals; (iv) Compressor seals; (v) Pressure relief valves; (vi) Flanges – Heat Exchangers; (vii) Flanges – Piping; (viii) Connectors – Piping; (ix) Open ended lines; and (x) Sampling connections, Equipment and line sizes more than 1.875 cm or ¾ inch are to be covered.
- (3) Applicability: LDAR programme would be applicable to components (given at 2 above) for following products/compounds: (i) hydrocarbon gases; (ii) Light liquid with vapour pressure @ 20°C > 1.0 kPa; and (iii) Heavy liquid with vapour pressure @ 20° C between 0.3 to 1.0 kPa.
- (4) While LDAR will not be applicable for heavy liquids with vapour pressure < 0.3 kPa, it will be desirable to check for liquid dripping as indication of leak.
- (5) Definition of leak: A leak is defined as the detection of VOC concentration more than the values (in ppm) specified below at the emission source using a hydrocarbon analyzer according to measurement protocol (US EPA – 453/R-95-017, 1995 Protocol for equipment leak emission estimates may be referred to:

Component	General Hydrocarbon (ppm)		Benzene (ppm)	
	Till 31 st Dec. 2008	w.e.f. January 01, 2009	Till 31 st Dec., 2008	w.e.f January 01, 2009
Pump/Compressor	10000	5000	3000	2000
Valves/Flanges	10000	3000	2000	1000
Other components	10000	3000	2000	1000

- (6) In addition, any component observed to be leaking by sight, sound, or smell, regardless of concentration (liquid dripping, visible vapor leak) or presence of bubbles using soap solution should be considered as leak.
- (7) Monitoring Requirements and Repair Schedule: Following frequency of monitoring of leaks and schedule for repair of leaks shall be followed:
- (8) The percentage leaking components should not be more than 2% for any group of components monitored excluding pumps/compressors. In the case of pumps/compressors it should be less than 10% of the total number of pumps/compressors or three pumps and compressors, whichever is greater.
- (9) Emission inventory: Refinery shall prepare an inventory of equipment components in the plant. After the instrumental measurement of leaks, emission from the components will be calculated using stratified emission factor (USEPA) or any other superior factors. The total fugitive emission will be established.

Component	Frequency of monitoring	Repair schedule
	Quarterly (semiannual after two consecutive periods with <2% leaks and annual after 5 periods with < 2% leaks)	Repair will be started within 5 working days and shall be completed within 15 working days after detection of leak for general hydrocarbons. In case of benzene, the leak shall be attended immediately for repair.
Pump seals	Quarterly	
Compressor seals	Quarterly	
Pressure relief devices	Quarterly	
Pressure relief devices (after venting)	Within 24 hours	
Heat Exchangers	Quarterly	
Process drains	Annually	
Components that are difficult to monitor	Annually	
Pump seals with visible liquid dripping	Immediately	Immediately
Any component with visible leaks	Immediately	Immediately
Any component after repair/ replacement	Within five days	-

- (10) Monitoring following types of monitoring methods may be judiciously employed for detection of leaks: (i) instrumental method of measurement of leaks; (ii) Audio, visual and olfactory (AVO) leak detection; and (iii) Soap bubble method.
- (11) Data on time of measurement and concentration value for leak detection; time of repair of leak; and time of measurement & concentration value after repair of leak should be documented for all the components.
- (12) Pressure relief and blow down systems should be discharged to a vapour collection and recovery system or to flare.
- (13) Open-ended lines should be closed by a blind flange or plugged.
- (14) A totally closed loop should be used in all routine samples.
- (15) Low emission packaging should be used for valves.
- (16) High integrity sealing materials should be used for flanges

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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MSP											
1	09-06-2025	Fuel Gas Inlet line U/S I/V U/S Flange	1	-	Flange	0	0	0	0	0	0
2	09-06-2025	Fuel Gas Inlet line U/S I/V Gland	2	-	Gland	0	0	0	0	0	0
3	09-06-2025	Fuel Gas Inlet line U/S I/V D/S Flange	3	-	Flange	0	0	0	0	0	0
4	09-06-2025	Fuel Gas Inlet line D/S I/V U/S Flange	4	-	Flange	0	0	0	0	0	0
5	09-06-2025	Fuel Gas Inlet line D/S I/V Gland	5	-	Gland	0	0	0	0	0	0
6	09-06-2025	Fuel Gas Inlet line D/S I/V D/S Flange	6	-	Flange	0	0	0	0	0	0
7	09-06-2025	Sour Gas Outlet line U/S I/V U/S Flange	7	-	Flange	0	0	0	0	0	0
8	09-06-2025	Sour Gas Outlet line U/S I/V Gland	8	-	Gland	0	0	0	0	0	0
9	09-06-2025	Sour Gas Outlet line U/S I/V D/S Flange	9	-	Flange	0	0	0	0	0	0
10	09-06-2025	Drain Line I/V Gland	10	-	Gland	0	0	0	0	0	0
11	09-06-2025	Drain Line Safety Flange	11	-	Flange	0	0	0	0	0	0
12	09-06-2025	Sour Gas Outlet line D/S I/V U/S Flange	12	-	Flange	0	0	0	0	0	0
13	09-06-2025	Sour Gas Outlet line D/S I/V Gland	13	-	Gland	0	0	0	0	0	0
14	09-06-2025	Sour Gas Outlet line D/S I/V D/S Flange	14	-	Flange	0	0	0	0	0	0
15	09-06-2025	LPG R/D Outlet line U/S I/V U/S Flange	15	-	Flange	0	0	0	0	0	0
16	09-06-2025	LPG R/D Outlet line U/S I/V Gland	16	-	Gland	0	0	0	0	0	0
17	09-06-2025	LPG R/D Outlet line U/S I/V D/S Flange	17	-	Flange	0	0	0	0	0	0
18	09-06-2025	Drain Line I/V Gland	18	-	Gland	0	0	0	0	0	0
19	09-06-2025	LPG R/D First I/V Gland	19	-	Gland	0	0	0	0	0	0
20	09-06-2025	LPG R/D Outlet line D/S I/V U/S Flange	20	-	Flange	0	0	0	0	0	0
21	09-06-2025	LPG R/D Outlet line D/S I/V Gland	21	-	Gland	0	0	0	0	0	0
22	09-06-2025	LPG R/D Outlet line D/S I/V D/S Flange	22	-	Flange	0	0	0	0	0	0
23	09-06-2025	Hydrogen Rich Gas To PSA Outlet line U/S I/V	23	-	Flange	0	0	0	0	0	0
24	09-06-2025	Hydrogen Rich Gas To PSA Outlet line U/S I/V	24	-	Flange	0	0	0	0	0	0
25	09-06-2025	Hydrogen Rich Gas To PSA Outlet line U/S I/V	25	-	Flange	0	0	0	0	0	0
26	09-06-2025	Drain Line I/V Gland	26	-	Gland	0	0	0	0	0	0
27	09-06-2025	Drain Line Safety Flange	27	-	Flange	0	0	0	0	0	0
28	09-06-2025	NRV U/S Flange	28	-	Flange	0	0	0	0	0	0
29	09-06-2025	NRV Top Flange	29	-	Flange	0	0	0	0	0	0
30	09-06-2025	NRV D/S Flange	30	-	Flange	0	0	0	0	0	0
31	09-06-2025	Hydrogen Rich Gas To PSA Outlet line D/S I/V	31	-	Flange	0	0	0	0	0	0
32	09-06-2025	Hydrogen Rich Gas To PSA Outlet line D/S I/V	32	-	Flange	0	0	0	0	0	0
33	09-06-2025	Hydrogen Rich Gas To PSA Outlet line D/S I/V	33	-	Flange	0	0	0	0	0	0
34	09-06-2025	Hydrogen From PSA Inlet line U/S I/V U/S Flange	34	-	Flange	0	0	0	0	0	0
35	09-06-2025	Hydrogen From PSA Inlet line U/S I/V Gland	35	-	Gland	0	0	0	0	0	0
36	09-06-2025	Hydrogen From PSA Inlet line U/S I/V D/S Flange	36	-	Flange	0	0	0	0	0	0
37	09-06-2025	NRV U/S Flange	37	-	Flange	0	0	0	0	0	0
38	09-06-2025	NRV Top Flange	38	-	Flange	0	0	0	0	0	0
39	09-06-2025	NRV D/S Flange	39	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	09-06-2025	Drain Line I/V Gland	40	-	Gland	0	0	0	0	0	0
41	09-06-2025	Drain Line Safety Flange	41	-	Flange	0	0	0	0	0	0
42	09-06-2025	Hydrogen From PSA Inlet line D/S I/V U/S Flange	42	-	Flange	0	0	0	0	0	0
43	09-06-2025	Hydrogen From PSA Inlet line D/S I/V Gland	43	-	Gland	0	0	0	0	0	0
44	09-06-2025	Hydrogen From PSA Inlet line D/S I/V D/S Flange	44	-	Flange	0	0	0	0	0	0
45	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 1st I/V U/S Flange	45	-	Flange	0	0	0	0	0	0
46	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 1st I/V Gland	46	-	Gland	0	0	0	0	0	0
47	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 1st I/V D/S Flange	47	-	Flange	0	0	0	0	0	0
48	09-06-2025	NRV U/S Flange	48	-	Flange	0	0	0	0	0	0
49	09-06-2025	NRV Top Flange	49	-	Flange	0	0	0	0	0	0
50	09-06-2025	NRV D/S Flange	50	-	Flange	0	0	0	0	0	0
51	09-06-2025	Drain Line I/V Gland	51	-	Gland	0	0	0	0	0	0
52	09-06-2025	Drain Line Safety Flange	52	-	Flange	0	0	0	0	0	0
53	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 2nd I/V U/S Flange	53	-	Flange	0	0	0	0	0	0
54	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 2nd I/V Gland	54	-	Gland	0	0	0	0	0	0
55	09-06-2025	To 14-VV-01 S/U H. NAPTHA To 2nd I/V D/S Flange	55	-	Flange	0	0	0	0	0	0
56	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 1	56	-	Flange	0	0	0	0	0	0
57	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 1	57	-	Flange	0	0	0	0	0	0
58	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 1	58	-	Flange	0	0	0	0	0	0
59	09-06-2025	NRV U/S Flange	59	-	Flange	0	0	0	0	0	0
60	09-06-2025	NRV Top Flange	60	-	Flange	0	0	0	0	0	0
61	09-06-2025	NRV D/S Flange	61	-	Flange	0	0	0	0	0	0
62	09-06-2025	Drain Line I/V Gland	62	-	Gland	0	0	0	0	0	0
63	09-06-2025	Drain Line Safety Flange	63	-	Flange	0	0	0	0	0	0
64	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 2	64	-	Flange	0	0	0	0	0	0
65	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 2	65	-	Flange	0	0	0	0	0	0
66	09-06-2025	To 14-VV-01 S/U H. NAPTHA To Storage line 2	66	-	Flange	0	0	0	0	0	0
67	09-06-2025	14-LV-1701 U/S line I/V U/S Flange	67	-	Flange	0	0	0	0	0	0
68	09-06-2025	14-LV-1701 U/S line I/V Gland	68	-	Gland	0	0	0	0	0	0
69	09-06-2025	14-LV-1701 U/S line I/V D/S Flange	69	-	Flange	0	0	0	0	0	0
70	09-06-2025	CDE line 1st I/V Gland	70	-	Gland	0	0	0	0	0	0
71	09-06-2025	CDE line 2nd I/V Gland	71	-	Gland	0	0	0	0	0	0
72	09-06-2025	Stainer Flange	72	-	Flange	0	0	0	0	0	0
73	09-06-2025	CDE line 3rd I/V Gland	73	-	Gland	0	0	0	0	0	0
74	09-06-2025	14-LV-1701 line C/V U/S Flange	74	-	Flange	0	0	0	0	0	0
75	09-06-2025	14-LV-1701 line C/V Gland	75	-	Gland	0	0	0	0	0	0
76	09-06-2025	14-LV-1701 line C/V D/S Flange	76	-	Flange	0	0	0	0	0	0
77	09-06-2025	14-LV-1701 line D/S line U/S Flange	77	-	Flange	0	0	0	0	0	0
78	09-06-2025	14-LV-1701 line D/S line Gland	78	-	Gland	0	0	0	0	0	0
79	09-06-2025	14-LV-1701 line D/S line D/S Flange	79	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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80	09-06-2025	Bypass line I/V U/S Flange	80	-	Flange	0	0	0	0	0	0
81	09-06-2025	Bypass line I/V Gland	81	-	Gland	0	0	0	0	0	0
82	09-06-2025	Bypass line I/V D/S Flange	82	-	Flange	0	0	0	0	0	0
83	09-06-2025	15-FV-1401 U/S line I/V U/S Flange	83	-	Flange	0	0	0	0	0	0
84	09-06-2025	15-FV-1401 U/S line I/V Gland	84	-	Gland	0	0	0	0	0	0
85	09-06-2025	15-FV-1401 U/S line I/V D/S Flange	85	-	Flange	0	0	0	0	0	0
86	09-06-2025	CDE line 1st I/V Gland	86	-	Gland	0	0	0	0	0	0
87	09-06-2025	CDE line 2nd I/V Gland	87	-	Gland	0	0	0	0	0	0
88	09-06-2025	Stainer Flange	88	-	Flange	0	0	0	0	0	0
89	09-06-2025	CBD Drain line Top Flange	89	-	Flange	0	0	0	0	0	0
90	09-06-2025	15-FV-1401 line C/V U/S Flange	90	-	Flange	0	0	0	0	0	0
91	09-06-2025	15-FV-1401 line C/V Gland	91	-	Gland	0	0	0	0	0	0
92	09-06-2025	15-FV-1401 line C/V D/S Flange	92	-	Flange	0	0	0	0	0	0
93	09-06-2025	15-FV-1401 line D/S line U/S Flange	93	-	Flange	0	0	0	0	0	0
94	09-06-2025	15-FV-1401 line D/S line Gland	94	-	Gland	0	0	0	0	0	0
95	09-06-2025	15-FV-1401 line D/S line D/S Flange	95	-	Flange	0	0	0	0	0	0
96	09-06-2025	Bypass line I/V U/S Flange	96	-	Flange	0	0	0	0	0	0
97	09-06-2025	Bypass line I/V Gland	97	-	Gland	0	0	0	0	0	0
98	09-06-2025	Bypass line I/V D/S Flange	98	-	Flange	0	0	0	0	0	0
99	09-06-2025	15-PV-1401 U/S line I/V U/S Flange	99	-	Flange	0	0	0	0	0	0
100	09-06-2025	15-PV-1401 U/S line I/V Gland	100	-	Gland	0	0	0	0	0	0
101	09-06-2025	15-PV-1401 U/S line I/V D/S Flange	101	-	Flange	0	0	0	0	0	0
102	09-06-2025	15-FV-1401 line C/V U/S Flange	102	-	Flange	0	0	0	0	0	0
103	09-06-2025	15-FV-1401 line C/V Gland	103	-	Gland	0	0	0	0	0	0
104	09-06-2025	15-FV-1401 line C/V D/S Flange	104	-	Flange	0	0	0	0	0	0
105	09-06-2025	15-FV-1401 line D/S line U/S Flange	105	-	Flange	0	0	0	0	0	0
106	09-06-2025	15-FV-1401 line D/S line Gland	106	-	Gland	0	0	0	0	0	0
107	09-06-2025	15-FV-1401 line D/S line D/S Flange	107	-	Flange	0	0	0	0	0	0
108	09-06-2025	To Flare line 1st I/V U/S Flange	108	-	Flange	0	0	0	0	0	0
109	09-06-2025	To Flare line 1st I/V Gland	109	-	Gland	0	0	0	0	0	0
110	09-06-2025	To Flare line 1st I/V D/S Flange	110	-	Flange	0	0	0	0	0	0
111	09-06-2025	NRV U/S Flange	111	-	Flange	0	0	0	0	0	0
112	09-06-2025	NRV Top Flange	112	-	Flange	0	0	0	0	0	0
113	09-06-2025	NRV D/S Flange	113	-	Flange	0	0	0	0	0	0
114	09-06-2025	Drain Line I/V Gland	114	-	Gland	0	0	0	0	0	0
115	09-06-2025	Drain Line Safety Flange	115	-	Flange	0	0	0	0	0	0
116	09-06-2025	To Flare line 2nd I/V U/S Flange	116	-	Flange	0	0	0	0	0	0
117	09-06-2025	To Flare line 2nd I/V Gland	117	-	Gland	0	0	0	0	0	0
118	09-06-2025	To Flare line 2nd I/V D/S Flange	118	-	Flange	0	0	0	0	0	0
119	09-06-2025	To FG Header line 1st I/V U/S Flange	119	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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120	09-06-2025	To FG Header line 1st I/V Gland	120	-	Gland	0	0	0	0	0	0
121	09-06-2025	To FG Header line 1st I/V D/S Flange	121	-	Flange	0	0	0	0	0	0
122	09-06-2025	NRV Top Flange	122	-	Flange	0	0	0	0	0	0
123	09-06-2025	NRV D/S Flange	123	-	Flange	0	0	0	0	0	0
124	09-06-2025	Drain Line I/V Gland	124	-	Gland	0	0	0	0	0	0
125	09-06-2025	Drain Line Safety Flange	125	-	Flange	0	0	0	0	0	0
126	09-06-2025	To FG Header line 2nd I/V U/S Flange	126	-	Flange	0	0	0	0	0	0
127	09-06-2025	To FG Header line 2nd I/V Gland	127	-	Gland	0	0	0	0	0	0
128	09-06-2025	To FG Header line 2nd I/V D/S Flange	128	-	Flange	0	0	0	0	0	0
129	09-06-2025	15-PA-CF-001A	129	-	Flange	0	0	0	0	0	0
130	09-06-2025	Suction line I/V U/S Flange	130	-	Flange	0	0	0	0	0	0
131	09-06-2025	Suction line I/V Gland	131	-	Gland	0	0	0	0	0	0
132	09-06-2025	Suction line I/V D/S Flange	132	-	Flange	0	0	0	0	0	0
133	09-06-2025	Stainer Top Flange	133	-	Flange	0	0	0	0	0	0
134	09-06-2025	P.G. Meter line I/V Gland	134	-	Gland	0	0	0	0	0	0
135	09-06-2025	Suction Line Flange	135	-	Flange	0	0	0	0	0	0
136	09-06-2025	Pump Seal	136	-	P.seal	0	0	0	0	0	0
137	09-06-2025	CBD line 1st I/V Gland	137	-	Gland	0	0	0	0	0	0
138	09-06-2025	Stainer Flange	138	-	Flange	0	0	0	0	0	0
139	09-06-2025	CBD line 2nd I/V Gland	139	-	Flange	0	0	0	0	0	0
140	09-06-2025	Drain Line I/V Gland	140	-	Flange	0	0	0	0	0	0
141	09-06-2025	OWS Point	141	-	Flange	0	0	0	0	0	0
142	09-06-2025	Discharge line U/S Flange	142	-	Flange	0	0	0	0	0	0
143	09-06-2025	Meter line Flange	143	-	Flange	0	0	0	0	0	0
144	09-06-2025	NRV U/S Flange	144	-	Flange	0	0	0	0	0	0
145	09-06-2025	NRV Top Flange	145	-	Flange	0	0	0	0	0	0
146	09-06-2025	NRV D/S Flange	146	-	Flange	0	0	0	0	0	0
147	09-06-2025	Discharge line I/V U/S Flange	147	-	Flange	0	0	0	0	0	0
148	09-06-2025	Discharge line I/V Gland	148	-	Gland	0	0	0	0	0	0
149	09-06-2025	Discharge line I/V D/S Flange	149	-	Flange	0	0	0	0	0	0
150	09-06-2025	15-PA-CF-001B	150	-	Flange	0	0	0	0	0	0
151	09-06-2025	Suction line I/V U/S Flange	151	-	Flange	0	0	0	0	0	0
152	09-06-2025	Suction Line I/V Gland	152	-	Gland	0	0	0	0	0	0
153	09-06-2025	Suction line I/V D/S Flange	153	-	Flange	0	0	0	0	0	0
154	09-06-2025	Stainer Top Flange	154	-	Flange	0	0	0	0	0	0
155	09-06-2025	P.G. Meter line I/V Gland	155	-	Gland	0	0	0	0	0	0
156	09-06-2025	Suction Line Flange	156	-	Flange	0	0	0	0	0	0
157	09-06-2025	Pump Seal	157	-	P.seal	0	0	0	0	0	0
158	09-06-2025	CBD line 1st I/V Gland	158	-	Gland	0	0	0	0	0	0
159	09-06-2025	Stainer Flange	159	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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160	09-06-2025	CBD line 2nd I/V Gland	160	-	Gland	0	0	0	0	0	0
161	09-06-2025	Drain Line I/V Gland	161	-	Gland	0	0	0	0	0	0
162	09-06-2025	OWS Point	162	-	Flange	0	0	0	0	0	0
163	09-06-2025	Discharge line U/S Flange	163	-	Flange	0	0	0	0	0	0
164	09-06-2025	Meter line Flange	164	-	Flange	0	0	0	0	0	0
165	09-06-2025	NRV U/S Flange	165	-	Flange	0	0	0	0	0	0
166	09-06-2025	NRV Top Flange	166	-	Flange	0	0	0	0	0	0
167	09-06-2025	NRV D/S Flange	167	-	Flange	0	0	0	0	0	0
168	09-06-2025	Discharge line I/V U/S Flange	168	-	Flange	0	0	0	0	0	0
169	09-06-2025	Discharge line I/V Gland	169	-	Gland	0	0	0	0	0	0
170	09-06-2025	Discharge line I/V D/S Flange	170	-	Flange	0	0	0	0	0	0
171	09-06-2025	15-PV-1301A U/S I/V U/S Flange	171	-	Flange	0	0	0	0	0	0
172	09-06-2025	15-PV-1301A U/S I/V Gland	172	-	Gland	0	0	0	0	0	0
173	09-06-2025	15-PV-1301A U/S I/V D/S Flange	173	-	Flange	0	0	0	0	0	0
174	09-06-2025	15-PV-1301A C/V U/S Flange	174	-	Flange	0	0	0	0	0	0
175	09-06-2025	15-PV-1301A C/V Gland	175	-	Gland	0	0	0	0	0	0
176	09-06-2025	15-PV-1301A C/V D/S Flange	176	-	Flange	0	0	0	0	0	0
177	09-06-2025	15-PV-1301A D/S I/V U/S Flange	177	-	Flange	0	0	0	0	0	0
178	09-06-2025	15-PV-1301A D/S I/V Gland	178	-	Gland	0	0	0	0	0	0
179	09-06-2025	15-PV-1301A D/S I/V D/S Flange	179	-	Flange	0	0	0	0	0	0
180	09-06-2025	Bypass line I/V U/S Flange	180	-	Flange	0	0	0	0	0	0
181	09-06-2025	Bypass line I/V Gland	181	-	Gland	0	0	0	0	0	0
182	09-06-2025	Bypass line I/V D/S Flange	182	-	Flange	0	0	0	0	0	0
183	09-06-2025	15-PA-CF-002A	183	-	Flange	0	0	0	0	0	0
184	09-06-2025	Suction line I/V U/S Flange	184	-	Flange	0	0	0	0	0	0
185	09-06-2025	Suction line I/V Gland	185	-	Gland	0	0	0	0	0	0
186	09-06-2025	Suction line I/V D/S Flange	186	-	Flange	0	0	0	0	0	0
187	09-06-2025	Stainer Top Flange	187	-	Flange	0	0	0	0	0	0
188	09-06-2025	P.G. Meter I/V Gland	188	-	Gland	0	0	0	0	0	0
189	09-06-2025	Suction Line Flange	189	-	Flange	0	0	0	0	0	0
190	09-06-2025	Pump Seal	190	-	P.seal	0	0	0	0	0	0
191	09-06-2025	CBD line 1st I/V Gland	191	-	Gland	0	0	0	0	0	0
192	09-06-2025	Stainer Flange	192	-	Flange	0	0	0	0	0	0
193	09-06-2025	CBD line 2nd I/V Gland	193	-	Gland	0	0	0	0	0	0
194	09-06-2025	Drain Line I/V Gland	194	-	Gland	0	0	0	0	0	0
195	09-06-2025	OWS Point	195	-	Flange	0	0	0	0	0	0
196	09-06-2025	Discharge Line Flange	196	-	Flange	0	0	0	0	0	0
197	09-06-2025	Meter line I/V Gland	197	-	Gland	0	0	0	0	0	0
198	09-06-2025	NRV U/S Flange	198	-	Flange	0	0	0	0	0	0
199	09-06-2025	NRV Top Flange	199	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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200	09-06-2025	Discharge line I/V U/S Flange	200	-	Flange	0	0	0	0	0	0
201	09-06-2025	Discharge line I/V Gland	201	-	Gland	0	0	0	0	0	0
202	09-06-2025	Discharge line I/V D/S Flange	202	-	Flange	0	0	0	0	0	0
203	09-06-2025	15-PA-CF-002B	203	-	Flange	0	0	0	0	0	0
204	09-06-2025	Suction line I/V U/S Flange	204	-	Flange	0	0	0	0	0	0
205	09-06-2025	Suction Line I/V Gland	205	-	Gland	0	0	0	0	0	0
206	09-06-2025	Suction line I/V D/S Flange	206	-	Flange	0	0	0	0	0	0
207	09-06-2025	Stainer Top Flange	207	-	Flange	0	0	0	0	0	0
208	09-06-2025	Meter line I/V Gland	208	-	Gland	0	0	0	0	0	0
209	09-06-2025	Suction Line Flange	209	-	Flange	0	0	0	0	0	0
210	09-06-2025	Pump Seal	210	-	P.seal	0	0	0	0	0	0
211	09-06-2025	CBD line 1st I/V Gland	211	-	Gland	0	0	0	0	0	0
212	09-06-2025	CBD line 2nd I/V Gland	212	-	Gland	0	0	0	0	0	0
213	09-06-2025	Stainer Flange	213	-	Flange	0	0	0	0	0	0
214	09-06-2025	Drain Line I/V Gland	214	-	Gland	0	0	0	0	0	0
215	09-06-2025	OWS Point	215	-	Flange	0	0	0	0	0	0
216	09-06-2025	Discharge Line Flange	216	-	Flange	0	0	0	0	0	0
217	09-06-2025	Meter line I/V Gland	217	-	Gland	0	0	0	0	0	0
218	09-06-2025	NRV Top Flange	218	-	Flange	0	0	0	0	0	0
219	09-06-2025	NRV D/S Flange	219	-	Flange	0	0	0	0	0	0
220	09-06-2025	Discharge line I/V U/S Flange	220	-	Flange	0	0	0	0	0	0
221	09-06-2025	Discharge line I/V Gland	221	-	Gland	0	0	0	0	0	0
222	09-06-2025	Discharge line I/V D/S Flange	222	-	Flange	0	0	0	0	0	0
223	09-06-2025	15-FV-1503 U/S line I/V Gland	223	-	Gland	0	0	0	0	0	0
224	09-06-2025	CBD line 1st I/V Gland	224	-	Gland	0	0	0	0	0	0
225	09-06-2025	CBD line 2nd I/V Gland	225	-	Gland	0	0	0	0	0	0
226	09-06-2025	Stainer Flange	226	-	Flange	0	0	0	0	0	0
227	09-06-2025	CBD line 3rd I/V Gland	227	-	Gland	0	0	0	0	0	0
228	09-06-2025	15-FV-1503 line C/V U/S Flange	228	-	Flange	0	0	0	0	0	0
229	09-06-2025	15-FV-1503 line C/V Gland	229	-	Gland	0	0	0	0	0	0
230	09-06-2025	15-FV-1503 line C/V D/S Flange	230	-	Flange	0	0	0	0	0	0
231	09-06-2025	15-FV-1503 D/S line I/V Gland	231	-	Gland	0	0	0	0	0	0
232	09-06-2025	Bypass line I/V Gland	232	-	Gland	0	0	0	0	0	0
233	09-06-2025	14-PACF-004A	233	-	Flange	0	0	0	0	0	0
234	09-06-2025	Suction line I/V U/S Flange	234	-	Flange	0	0	0	0	0	0
235	09-06-2025	Suction Line I/V Gland	235	-	Gland	0	0	0	0	0	0
236	09-06-2025	Suction line I/V D/S Flange	236	-	Flange	0	0	0	0	0	0
237	09-06-2025	Stainer Top Flange	237	-	Flange	0	0	0	0	0	0
238	09-06-2025	Suction Line Flange	238	-	Flange	0	0	0	0	0	0
239	09-06-2025	Pump Seal	239	-	P.seal	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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240	09-06-2025	Discharge Line Flange	240	-	Flange	0	0	0	0	0	0
241	09-06-2025	Meter line I/V Gland	241	-	Gland	0	0	0	0	0	0
242	09-06-2025	NRV U/S Flange	242	-	Flange	0	0	0	0	0	0
243	09-06-2025	NRV Top Flange	243	-	Flange	0	0	0	0	0	0
244	09-06-2025	NRV D/S Flange	244	-	Flange	0	0	0	0	0	0
245	09-06-2025	Discharge line I/V U/S Flange	245	-	Flange	0	0	0	0	0	0
246	09-06-2025	Discharge line I/V Gland	246	-	Gland	0	0	0	0	0	0
247	09-06-2025	Discharge line I/V D/S Flange	247	-	Flange	0	0	0	0	0	0
248	09-06-2025	CBD line 1st I/V Gland	248	-	Gland	0	0	0	0	0	0
249	09-06-2025	CBD line 2nd I/V Gland	249	-	Gland	0	0	0	0	0	0
250	09-06-2025	Drain Line I/V Gland	250	-	Gland	0	0	0	0	0	0
251	09-06-2025	OWS Point	251	-	Flange	0	0	0	0	0	0
252	09-06-2025	Stainer Flange	252	-	Flange	0	0	0	0	0	0
253	09-06-2025	14-PACF-004B	253	-	Flange	0	0	0	0	0	0
254	09-06-2025	Suction line I/V U/S Flange	254	-	Flange	0	0	0	0	0	0
255	09-06-2025	Suction Line I/V Gland	255	-	Gland	0	0	0	0	0	0
256	09-06-2025	Suction line I/V D/S Flange	256	-	Flange	0	0	0	0	0	0
257	09-06-2025	Stainer Top Flange	257	-	Flange	0	0	0	0	0	0
258	09-06-2025	Suction Line Flange	258	-	Flange	0	0	0	0	0	0
259	09-06-2025	Pump Seal	259	-	P.seal	0	0	0	0	0	0
260	09-06-2025	Discharge Line Flange	260	-	Flange	0	0	0	0	0	0
261	09-06-2025	Meter line I/V Gland	261	-	Gland	0	0	0	0	0	0
262	09-06-2025	NRV U/S Flange	262	-	Flange	0	0	0	0	0	0
263	09-06-2025	NRV Top Flange	263	-	Flange	0	0	0	0	0	0
264	09-06-2025	NRV D/S Flange	264	-	Flange	0	0	0	0	0	0
265	09-06-2025	Discharge line I/V U/S Flange	265	-	Flange	0	0	0	0	0	0
266	09-06-2025	Discharge line I/V Gland	266	-	Gland	0	0	0	0	0	0
267	09-06-2025	Discharge line I/V D/S Flange	267	-	Flange	0	0	0	0	0	0
268	09-06-2025	CBD line 1st I/V Gland	268	-	Gland	0	0	0	0	0	0
269	09-06-2025	CBD line 2nd I/V Gland	269	-	Gland	0	0	0	0	0	0
270	09-06-2025	Stainer Flange	270	-	Flange	0	0	0	0	0	0
271	09-06-2025	CBD line 3rd I/V Gland	271	-	Gland	0	0	0	0	0	0
272	09-06-2025	Drain Line I/V Gland	272	-	Gland	0	0	0	0	0	0
273	09-06-2025	OWS Point	273	-	Flange	0	0	0	0	0	0
274	09-06-2025	14-PACF-006A	274	-	Flange	0	0	0	0	0	0
275	09-06-2025	Suction line I/V U/S Flange	275	-	Flange	0	0	0	0	0	0
276	09-06-2025	Suction Line I/V Gland	276	-	Gland	0	0	0	0	0	0
277	09-06-2025	Suction line I/V D/S Flange	277	-	Flange	0	0	0	0	0	0
278	09-06-2025	Stainer Top Flange	278	-	Flange	0	0	0	0	0	0
279	09-06-2025	Suction Line Flange	279	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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280	09-06-2025	Pump Seal	280	-	P.seal	0	0	0	0	0	0
281	09-06-2025	Discharge Line Flange	281	-	Flange	0	0	0	0	0	0
282	09-06-2025	Meter line I/V Gland	282	-	Gland	0	0	0	0	0	0
283	09-06-2025	NRV U/S Flange	283	-	Flange	0	0	0	0	0	0
284	09-06-2025	NRV Top Flange	284	-	Flange	0	0	0	0	0	0
285	09-06-2025	NRV D/S Flange	285	-	Flange	0	0	0	0	0	0
286	09-06-2025	Drain Line I/V Gland	286	-	Gland	0	0	0	0	0	0
287	09-06-2025	Drain Line Safety Flange	287	-	Flange	0	0	0	0	0	0
288	09-06-2025	Discharge line I/V U/S Flange	288	-	Flange	0	0	0	0	0	0
289	09-06-2025	Discharge line I/V Gland	289	-	Gland	0	0	0	0	0	0
290	09-06-2025	Discharge line I/V D/S Flange	290	-	Flange	0	0	0	0	0	0
291	09-06-2025	Pump To CBD line 1st I/V U/S Flange	291	-	Flange	0	0	0	0	0	0
292	09-06-2025	Pump To CBD line 1st I/V Gland	292	-	Gland	0	0	0	0	0	0
293	09-06-2025	Pump To CBD line 1st I/V D/S Flange	293	-	Flange	0	0	0	0	0	0
294	09-06-2025	Pump To CBD line 2nd I/V Gland	294	-	Gland	0	0	0	0	0	0
295	09-06-2025	Stainer Flange	295	-	Flange	0	0	0	0	0	0
296	09-06-2025	Pump To CBD line 3rd I/V Gland	296	-	Gland	0	0	0	0	0	0
297	09-06-2025	OWS Point	297	-	Flange	0	0	0	0	0	0
298	09-06-2025	14-PACF-006B	298	-	Flange	0	0	0	0	0	0
299	09-06-2025	Suction line I/V U/S Flange	299	-	Flange	0	0	0	0	0	0
300	09-06-2025	Suction Line I/V Gland	300	-	Gland	0	0	0	0	0	0
301	09-06-2025	Suction line I/V D/S Flange	301	-	Flange	0	0	0	0	0	0
302	09-06-2025	Stainer Top Flange	302	-	Flange	0	0	0	0	0	0
303	09-06-2025	Suction Line Flange	303	-	Flange	0	0	0	0	0	0
304	09-06-2025	Pump Seal	304	-	P.seal	0	0	0	0	0	0
305	09-06-2025	Discharge Line Flange	305	-	Flange	0	0	0	0	0	0
306	09-06-2025	Meter line I/V Gland	306	-	Gland	0	0	0	0	0	0
307	09-06-2025	NRV U/S Flange	307	-	Flange	0	0	0	0	0	0
308	09-06-2025	NRV Top Flange	308	-	Flange	0	0	0	0	0	0
309	09-06-2025	NRV D/S Flange	309	-	Flange	0	0	0	0	0	0
310	09-06-2025	Drain Line I/V Gland	310	-	Gland	0	0	0	0	0	0
311	09-06-2025	Drain Line Safety Flange	311	-	Flange	0	0	0	0	0	0
312	09-06-2025	Discharge line I/V U/S Flange	312	-	Flange	0	0	0	0	0	0
313	09-06-2025	Discharge line I/V Gland	313	-	Gland	0	0	0	0	0	0
314	09-06-2025	Discharge line I/V D/S Flange	314	-	Flange	0	0	0	0	0	0
315	09-06-2025	Pump To CBD line 1st I/V U/S Flange	315	-	Flange	0	0	0	0	0	0
316	09-06-2025	Pump To CBD line 1st I/V Gland	316	-	Gland	0	0	0	0	0	0
317	09-06-2025	Pump To CBD line 1st I/V D/S Flange	317	-	Flange	0	0	0	0	0	0
318	09-06-2025	Pump To CBD line 2nd I/V Gland	318	-	Gland	0	0	0	0	0	0
319	09-06-2025	Stainer Flange	319	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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320	09-06-2025	Pump To CBD line 3rd I/V Gland	320	-	Gland	0	0	0	0	0	0
321	09-06-2025	OWS Point	321	-	Flange	0	0	0	0	0	0
322	09-06-2025	14-FV-1103 U/S line I/V U/S Flange	322	-	Flange	0	0	0	0	0	0
323	09-06-2025	14-FV-1103 U/S line I/V Gland	323	-	Gland	0	0	0	0	0	0
324	09-06-2025	14-FV-1103 U/S line I/V D/S Flange	324	-	Flange	0	0	0	0	0	0
325	09-06-2025	Drain Line 1st I/V Gland	325	-	Gland	0	0	0	0	0	0
326	09-06-2025	Drain Line 2nd I/V Gland	326	-	Gland	0	0	0	0	0	0
327	09-06-2025	Stainer Flange	327	-	Flange	0	0	0	0	0	0
328	09-06-2025	Drain Line 3rd I/V Gland	328	-	Gland	0	0	0	0	0	0
329	09-06-2025	14-FV-1103 C/V U/S Flange	329	-	Flange	0	0	0	0	0	0
330	09-06-2025	14-FV-1103 C/V Gland	330	-	Gland	0	0	0	0	0	0
331	09-06-2025	14-FV-1103 C/V D/S Flange	331	-	Flange	0	0	0	0	0	0
332	09-06-2025	14-FV-1103 D/S line I/V U/S Flange	332	-	Flange	0	0	0	0	0	0
333	09-06-2025	14-FV-1103 D/S line I/V Gland	333	-	Gland	0	0	0	0	0	0
334	09-06-2025	14-FV-1103 D/S line I/V D/S Flange	334	-	Flange	0	0	0	0	0	0
335	09-06-2025	Bypass line I/V U/S Flange	335	-	Flange	0	0	0	0	0	0
336	09-06-2025	Bypass line I/V Gland	336	-	Gland	0	0	0	0	0	0
337	09-06-2025	Bypass line I/V D/S Flange	337	-	Flange	0	0	0	0	0	0
338	09-06-2025	14-UV-1101 CV U/S Flange	338	-	Flange	0	0	0	0	0	0
339	09-06-2025	14-UV-1101 CV Gland	339	-	Gland	0	0	0	0	0	0
340	09-06-2025	14-UV-1101 CV D/S Flange	340	-	Flange	0	0	0	0	0	0
341	09-06-2025	14-PA-CF-001A	341	-	Flange	0	0	0	0	0	0
342	09-06-2025	Suction line I/V U/S Flange	342	-	Flange	0	0	0	0	0	0
343	09-06-2025	Suction Line I/V Gland	343	-	Gland	0	0	0	0	0	0
344	09-06-2025	Suction line I/V D/S Flange	344	-	Flange	0	0	0	0	0	0
345	09-06-2025	Stainer Top Flange	345	-	Flange	0	0	0	0	0	0
346	09-06-2025	Drain Line I/V Gland	346	-	Gland	0	0	0	0	0	0
347	09-06-2025	Drain Line Stainer Flange	347	-	Flange	0	0	0	0	0	0
348	09-06-2025	Suction Line Flange	348	-	Flange	0	0	0	0	0	0
349	09-06-2025	Pump Seal	349	-	P.seal	0	0	0	0	0	0
350	09-06-2025	Discharge Line Flange	350	-	Flange	0	0	0	0	0	0
351	09-06-2025	Meter line I/V Gland	351	-	Gland	0	0	0	0	0	0
352	09-06-2025	NRV U/S Flange	352	-	Flange	0	0	0	0	0	0
353	09-06-2025	NRV Top Flange	353	-	Flange	0	0	0	0	0	0
354	09-06-2025	NRV D/S Flange	354	-	Flange	0	0	0	0	0	0
355	09-06-2025	Drain Line I/V Gland	355	-	Gland	0	0	0	0	0	0
356	09-06-2025	Drain Line Stainer Flange	356	-	Flange	0	0	0	0	0	0
357	09-06-2025	Discharge line I/V U/S Flange	357	-	Flange	0	0	0	0	0	0
358	09-06-2025	Discharge line I/V Gland	358	-	Gland	0	0	0	0	0	0
359	09-06-2025	Discharge line I/V D/S Flange	359	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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360	09-06-2025	Pump To CBD line 1st I/V Gland	360	-	Gland	0	0	0	0	0	0
361	09-06-2025	Pump To CBD line 2nd I/V Gland	361	-	Gland	0	0	0	0	0	0
362	09-06-2025	Stainer Flange	362	-	Flange	0	0	0	0	0	0
363	09-06-2025	Pump To CBD line 3rd I/V Gland	363	-	Gland	0	0	0	0	0	0
364	09-06-2025	OWS Point	364	-	Flange	0	0	0	0	0	0
365	09-06-2025	14-PA-CF-001B	365	-	Flange	0	0	0	0	0	0
366	09-06-2025	Suction line I/V U/S Flange	366	-	Flange	0	0	0	0	0	0
367	09-06-2025	Suction Line I/V Gland	367	-	Gland	0	0	0	0	0	0
368	09-06-2025	Suction line I/V D/S Flange	368	-	Flange	0	0	0	0	0	0
369	09-06-2025	Stainer Top Flange	369	-	Flange	0	0	0	0	0	0
370	09-06-2025	Drain Line I/V Gland	370	-	Gland	0	0	0	0	0	0
371	09-06-2025	Drain Line Stainer Flange	371	-	Flange	0	0	0	0	0	0
372	09-06-2025	Suction Line Flange	372	-	Flange	0	0	0	0	0	0
373	09-06-2025	Pump Seal	373	-	P.seal	0	0	0	0	0	0
374	09-06-2025	Discharge Line Flange	374	-	Flange	0	0	0	0	0	0
375	09-06-2025	Meter line I/V Gland	375	-	Gland	0	0	0	0	0	0
376	09-06-2025	NRV U/S Flange	376	-	Flange	0	0	0	0	0	0
377	09-06-2025	NRV Top Flange	377	-	Flange	0	0	0	0	0	0
378	09-06-2025	NRV D/S Flange	378	-	Flange	0	0	0	0	0	0
379	09-06-2025	Drain Line I/V Gland	379	-	Gland	0	0	0	0	0	0
380	09-06-2025	Drain Line Stainer Flange	380	-	Flange	0	0	0	0	0	0
381	09-06-2025	Discharge line I/V U/S Flange	381	-	Flange	0	0	0	0	0	0
382	09-06-2025	Discharge line I/V Gland	382	-	Gland	0	0	0	0	0	0
383	09-06-2025	Discharge line I/V D/S Flange	383	-	Flange	0	0	0	0	0	0
384	09-06-2025	Pump To CBD line 1st I/V Gland	384	-	Gland	0	0	0	0	0	0
385	09-06-2025	Pump To CBD line 2nd I/V Gland	385	-	Gland	0	0	0	0	0	0
386	09-06-2025	Stainer Flange	386	-	Flange	0	0	0	0	0	0
387	09-06-2025	Pump To CBD line 3rd I/V Gland	387	-	Gland	0	0	0	0	0	0
388	09-06-2025	OWS Point	388	-	Flange	0	0	0	0	0	0
389	09-06-2025	NAPTHA to SLOP U/S line I/V U/S Flange	389	-	Flange	0	0	0	0	0	0
390	09-06-2025	NAPTHA to SLOP U/S line I/V Gland	390	-	Gland	0	0	0	0	0	0
391	09-06-2025	NAPTHA to SLOP U/S line I/V D/S Flange	391	-	Flange	0	0	0	0	0	0
392	09-06-2025	NRV U/S Flange	392	-	Flange	0	0	0	0	0	0
393	09-06-2025	NRV Top Flange	393	-	Flange	0	0	0	0	0	0
394	09-06-2025	NRV D/S Flange	394	-	Flange	0	0	0	0	0	0
395	09-06-2025	Drain Line I/V Gland	395	-	Gland	0	0	0	0	0	0
396	09-06-2025	Drain Line Safety Flange	396	-	Flange	0	0	0	0	0	0
397	09-06-2025	NAPTHA to SLOP D/S line I/V U/S Flange	397	-	Flange	0	0	0	0	0	0
398	09-06-2025	NAPTHA to SLOP D/S line I/V Gland	398	-	Gland	0	0	0	0	0	0
399	09-06-2025	NAPTHA to SLOP D/S line I/V D/S Flange	399	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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400	09-06-2025	Splitter Reflux To SLOP U/S line I/V U/S Flange	400	-	Flange	0	0	0	0	0	0
401	09-06-2025	Splitter Reflux To SLOP U/S line I/V Gland	401	-	Gland	0	0	0	0	0	0
402	09-06-2025	Splitter Reflux To SLOP U/S line I/V D/S Flange	402	-	Flange	0	0	0	0	0	0
403	09-06-2025	NRV U/S Flange	403	-	Flange	0	0	0	0	0	0
404	09-06-2025	NRV Top Flange	404	-	Flange	0	0	0	0	0	0
405	09-06-2025	NRV D/S Flange	405	-	Flange	0	0	0	0	0	0
406	09-06-2025	Drain Line I/V Gland	406	-	Gland	0	0	0	0	0	0
407	09-06-2025	Drain Line Safety Flange	407	-	Flange	0	0	0	0	0	0
408	09-06-2025	Splitter Reflux To SLOP D/S line I/V U/S Flange	408	-	Flange	0	0	0	0	0	0
409	09-06-2025	Splitter Reflux To SLOP D/S line I/V Gland	409	-	Gland	0	0	0	0	0	0
410	09-06-2025	Splitter Reflux To SLOP D/S line I/V D/S Flange	410	-	Flange	0	0	0	0	0	0
411	09-06-2025	2nd I/V U/S Flange	411	-	Flange	0	0	0	0	0	0
412	09-06-2025	2nd I/V Gland	412	-	Gland	0	0	0	0	0	0
413	09-06-2025	2nd I/V D/S Flange	413	-	Flange	0	0	0	0	0	0
414	09-06-2025	Stritter Reflux To SLOP U/S line 1st I/V U/S Flange	414	-	Flange	0	0	0	0	0	0
415	09-06-2025	Stritter Reflux To SLOP U/S line 1st I/V Gland	415	-	Gland	0	0	0	0	0	0
416	09-06-2025	Stritter Reflux To SLOP U/S line 1st I/V D/S Flange	416	-	Flange	0	0	0	0	0	0
417	09-06-2025	Stritter Reflux To SLOP U/S line 2nd I/V U/S Flange	417	-	Flange	0	0	0	0	0	0
418	09-06-2025	Stritter Reflux To SLOP U/S line 2nd I/V Gland	418	-	Gland	0	0	0	0	0	0
419	09-06-2025	Stritter Reflux To SLOP U/S line 2nd I/V D/S Flange	419	-	Flange	0	0	0	0	0	0
420	09-06-2025	NRV U/S Flange	420	-	Flange	0	0	0	0	0	0
421	09-06-2025	NRV Top Flange	421	-	Flange	0	0	0	0	0	0
422	09-06-2025	NRV D/S Flange	422	-	Flange	0	0	0	0	0	0
423	09-06-2025	Drain Line I/V Gland	423	-	Gland	0	0	0	0	0	0
424	09-06-2025	Drain Line Safety Flange	424	-	Flange	0	0	0	0	0	0
425	09-06-2025	Stritter Reflux To SLOP D/S line I/V U/S Flange	425	-	Flange	0	0	0	0	0	0
426	09-06-2025	Stritter Reflux To SLOP D/S line I/V Gland	426	-	Gland	0	0	0	0	0	0
427	09-06-2025	Stritter Reflux To SLOP D/S line I/V D/S Flange	427	-	Flange	0	0	0	0	0	0
428	09-06-2025	Hydrogen Rich Gas From Unit 15 U/S I/V U/S Flange	428	-	Flange	0	0	0	0	0	0
429	09-06-2025	Hydrogen Rich Gas From Unit 15 U/S I/V Gland	429	-	Gland	0	0	0	0	0	0
430	09-06-2025	Hydrogen Rich Gas From Unit 15 U/S I/V D/S Flange	430	-	Flange	0	0	0	0	0	0
431	09-06-2025	NRV U/S Flange	431	-	Flange	0	0	0	0	0	0
432	09-06-2025	NRV Top Flange	432	-	Flange	0	0	0	0	0	0
433	09-06-2025	NRV D/S Flange	433	-	Flange	0	0	0	0	0	0
434	09-06-2025	Drain Line I/V Gland	434	-	Gland	0	0	0	0	0	0
435	09-06-2025	Drain Line Safety Flange	435	-	Flange	0	0	0	0	0	0
436	09-06-2025	Hydrogen Rich Gas From Unit 15 D/S I/V U/S Flange	436	-	Flange	0	0	0	0	0	0
437	09-06-2025	Hydrogen Rich Gas From Unit 15 D/S I/V Gland	437	-	Gland	0	0	0	0	0	0
438	09-06-2025	Hydrogen Rich Gas From Unit 15 D/S I/V D/S Flange	438	-	Flange	0	0	0	0	0	0
439	09-06-2025	Hydrogen From PSA To 16-VV-2 U/S I/V U/S Flange	439	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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440	09-06-2025	Hydrogen From PSA To 16-VV-2 U/S I/V Gland	440	-	Gland	0	0	0	0	0	0
441	09-06-2025	Hydrogen From PSA To 16-VV-2 U/S I/V D/S Flange	441	-	Flange	0	0	0	0	0	0
442	09-06-2025	NRV U/S Flange	442	-	Flange	0	0	0	0	0	0
443	09-06-2025	NRV Top Flange	443	-	Flange	0	0	0	0	0	0
444	09-06-2025	NRV D/S Flange	444	-	Flange	0	0	0	0	0	0
445	09-06-2025	Drain Line I/V Gland	445	-	Gland	0	0	0	0	0	0
446	09-06-2025	Drain Line Safety Flange	446	-	Flange	0	0	0	0	0	0
447	09-06-2025	Hydrogen From PSA To 16-VV-2 D/S I/V U/S Flange	447	-	Flange	0	0	0	0	0	0
448	09-06-2025	Hydrogen From PSA To 16-VV-2 D/S I/V Gland	448	-	Flange	0	0	0	0	0	0
449	09-06-2025	Hydrogen From PSA To 16-VV-2 D/S I/V D/S Flange	449	-	Flange	0	0	0	0	0	0
450	09-06-2025	14-FV-1501-CV U/S I/V U/S Flange	450	-	Flange	0	0	0	0	0	0
451	09-06-2025	14-FV-1501-CV U/S I/V Gland	451	-	Gland	0	0	0	0	0	0
452	09-06-2025	14-FV-1501-CV U/S I/V D/S Flange	452	-	Flange	0	0	0	0	0	0
453	09-06-2025	CBD line 1st I/V Gland	453	-	Gland	0	0	0	0	0	0
454	09-06-2025	CBD line 2nd I/V Gland	454	-	Gland	0	0	0	0	0	0
455	09-06-2025	CBD line 3rd I/V Gland	455	-	Gland	0	0	0	0	0	0
456	09-06-2025	Stainer Flange	456	-	Flange	0	0	0	0	0	0
457	09-06-2025	14-FV-1501-CV U/S Flange	457	-	Flange	0	0	0	0	0	0
458	09-06-2025	14-FV-1501-CV Gland	458	-	Gland	0	0	0	0	0	0
459	09-06-2025	14-FV-1501-CV D/S Flange	459	-	Flange	0	0	0	0	0	0
460	09-06-2025	14-FV-1501-CV D/S I/V U/S Flange	460	-	Flange	0	0	0	0	0	0
461	09-06-2025	14-FV-1501-CV D/S I/V Gland	461	-	Gland	0	0	0	0	0	0
462	09-06-2025	14-FV-1501-CV D/S I/V D/S Flange	462	-	Flange	0	0	0	0	0	0
463	09-06-2025	Bypass line I/V U/S Flange	463	-	Flange	0	0	0	0	0	0
464	09-06-2025	Bypass line I/V Gland	464	-	Gland	0	0	0	0	0	0
465	09-06-2025	Bypass line I/V D/S Flange	465	-	Flange	0	0	0	0	0	0
466	09-06-2025	From 14-PA-4 A/B to SLOP 1st I/V U/S Flange	466	-	Flange	0	0	0	0	0	0
467	09-06-2025	From 14-PA-4 A/B to SLOP 1st I/V Gland	467	-	Gland	0	0	0	0	0	0
468	09-06-2025	From 14-PA-4 A/B to SLOP 1st I/V D/S Flange	468	-	Flange	0	0	0	0	0	0
469	09-06-2025	From 14-PA-4 A/B to SLOP 2nd I/V Gland	469	-	Gland	0	0	0	0	0	0
470	09-06-2025	From 14-PA-4 A/B to SLOP 2nd I/V D/S Flange	470	-	Flange	0	0	0	0	0	0
471	09-06-2025	14-FV-1701 U/S I/V U/S Flange	471	-	Flange	0	0	0	0	0	0
472	09-06-2025	14-FV-1701 U/S I/V Gland	472	-	Gland	0	0	0	0	0	0
473	09-06-2025	14-FV-1701 U/S I/V D/S Flange	473	-	Flange	0	0	0	0	0	0
474	09-06-2025	CBD line 1st I/V Gland	474	-	Gland	0	0	0	0	0	0
475	09-06-2025	CBD line 2nd I/V Gland	475	-	Gland	0	0	0	0	0	0
476	09-06-2025	CBD line 3rd I/V Gland	476	-	Gland	0	0	0	0	0	0
477	09-06-2025	Stainer Flange	477	-	Flange	0	0	0	0	0	0
478	09-06-2025	14-FV-1701 C/V U/S Flange	478	-	Flange	0	0	0	0	0	0
479	09-06-2025	14-FV-1701 C/V Gland	479	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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480	09-06-2025	14-FV-1701 C/V D/S Flange	480	-	Flange	0	0	0	0	0	0
481	09-06-2025	14-FV-1701 D/S I/V U/S Flange	481	-	Flange	0	0	0	0	0	0
482	09-06-2025	14-FV-1701 D/S I/V Gland	482	-	Gland	0	0	0	0	0	0
483	09-06-2025	14-FV-1701 D/S I/V D/S Flange	483	-	Flange	0	0	0	0	0	0
484	09-06-2025	Bypass line I/V U/S Flange	484	-	Flange	0	0	0	0	0	0
485	09-06-2025	14-FV-1401 U/S I/V U/S Flange	485	-	Flange	0	0	0	0	0	0
486	09-06-2025	14-FV-1401 U/S I/V Gland	486	-	Gland	0	0	0	0	0	0
487	09-06-2025	14-FV-1401 U/S I/V D/S Flange	487	-	Flange	0	0	0	0	0	0
488	09-06-2025	CBD line 1st I/V Gland	488	-	Gland	0	0	0	0	0	0
489	09-06-2025	CBD line 2nd I/V Gland	489	-	Gland	0	0	0	0	0	0
490	09-06-2025	CBD line 3rd I/V Gland	490	-	Gland	0	0	0	0	0	0
491	09-06-2025	Stainer Flange	491	-	Flange	0	0	0	0	0	0
492	09-06-2025	14-FV-1401 C/V U/S Flange	492	-	Flange	0	0	0	0	0	0
493	09-06-2025	14-FV-1401 C/V Gland	493	-	Gland	0	0	0	0	0	0
494	09-06-2025	14-FV-1401 C/V D/S Flange	494	-	Flange	0	0	0	0	0	0
495	09-06-2025	14-FV-1401 D/S I/V U/S Flange	495	-	Flange	0	0	0	0	0	0
496	09-06-2025	14-FV-1401 D/S I/V Gland	496	-	Gland	0	0	0	0	0	0
497	09-06-2025	14-FV-1401 D/S I/V D/S Flange	497	-	Flange	0	0	0	0	0	0
498	09-06-2025	Bypass line I/V U/S Flange	498	-	Flange	0	0	0	0	0	0
499	09-06-2025	Bypass line I/V Gland	499	-	Gland	0	0	0	0	0	0
500	09-06-2025	Bypass line I/V D/S Flange	500	-	Flange	0	0	0	0	0	0
501	09-06-2025	From 14-PA-CF-001 Start Up line I/V U/S Flange	501	-	Flange	0	0	0	0	0	0
502	09-06-2025	From 14-PA-CF-001 Start Up line I/V Gland	502	-	Flange	0	0	0	0	0	0
503	09-06-2025	From 14-PA-CF-001 Start Up line I/V D/S Flange	503	-	Flange	0	0	0	0	0	0
504	09-06-2025	Hydrogen From Unit 15 1st I/V Gland	504	-	Gland	0	0	0	0	0	0
505	09-06-2025	Stainer Flange	505	-	Flange	0	0	0	0	0	0
506	09-06-2025	Top Flange	506	-	Flange	0	0	0	0	0	0
507	09-06-2025	Drain Line I/V Gland	507	-	Gland	0	0	0	0	0	0
508	09-06-2025	Drain Line Safety Flange	508	-	Flange	0	0	0	0	0	0
509	09-06-2025	Hydrogen From Unit 15 2nd I/V Gland	509	-	Gland	0	0	0	0	0	0
510	09-06-2025	14-FV-1402 U/S line I/V Gland	510	-	Gland	0	0	0	0	0	0
511	09-06-2025	CBD line I/V Gland	511	-	Gland	0	0	0	0	0	0
512	09-06-2025	14-FV-1402 C/V U/S Flange	512	-	Flange	0	0	0	0	0	0
513	09-06-2025	14-FV-1402 C/V Gland	513	-	Gland	0	0	0	0	0	0
514	09-06-2025	CBD line I/V Gland	514	-	Gland	0	0	0	0	0	0
515	09-06-2025	14-FV-1402 D/S I/V Gland	515	-	Gland	0	0	0	0	0	0
516	09-06-2025	Bypass line I/V Gland	516	-	Gland	0	0	0	0	0	0
517	09-06-2025	Heavy Naptha From Unit-14 line 1st I/V U/S Flange	517	-	Flange	0	0	0	0	0	0
518	09-06-2025	Heavy Naptha From Unit-14 line 1st I/V Gland	518	-	Gland	0	0	0	0	0	0
519	09-06-2025	Heavy Naptha From Unit-14 line 1st I/V D/S Flange	519	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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520	09-06-2025	Heavy Naptha From Unit-14 line 2nd I/V Gland	520	-	Gland	0	0	0	0	0	0
521	09-06-2025	Heavy Naptha From Unit-14 line 2nd I/V D/S Flange	521	-	Flange	0	0	0	0	0	0
522	09-06-2025	Feed Naptha To Unit-15 line U/S I/V U/S Flange	522	-	Flange	0	0	0	0	0	0
523	09-06-2025	Feed Naptha To Unit-15 line U/S I/V Gland	523	-	Flange	0	0	0	0	0	0
524	09-06-2025	Feed Naptha To Unit-15 line U/S I/V D/S Flange	524	-	Flange	0	0	0	0	0	0
525	09-06-2025	NRV U/S Flange	525	-	Flange	0	0	0	0	0	0
526	09-06-2025	NRV Top Flange	526	-	Flange	0	0	0	0	0	0
527	09-06-2025	NRV D/S Flange	527	-	Flange	0	0	0	0	0	0
528	09-06-2025	Drain Line I/V Gland	528	-	Gland	0	0	0	0	0	0
529	09-06-2025	Drain Line Safety Flange	529	-	Flange	0	0	0	0	0	0
530	09-06-2025	Feed Naptha To Unit-15 line D/S I/V U/S Flange	530	-	Flange	0	0	0	0	0	0
531	09-06-2025	Feed Naptha To Unit-15 line D/S I/V Gland	531	-	Gland	0	0	0	0	0	0
532	09-06-2025	Feed Naptha To Unit-15 line D/S I/V D/S Flange	532	-	Flange	0	0	0	0	0	0
533	09-06-2025	S/U line (Reaction Section BP) line U/S I/V U/S Flange	533	-	Flange	0	0	0	0	0	0
534	09-06-2025	S/U line (Reaction Section BP) line U/S I/V Gland	534	-	Gland	0	0	0	0	0	0
535	09-06-2025	S/U line (Reaction Section BP) line U/S I/V D/S Flange	535	-	Flange	0	0	0	0	0	0
536	09-06-2025	S/U line (Reaction Section BP) line D/S I/V U/S Flange	536	-	Flange	0	0	0	0	0	0
537	09-06-2025	S/U line (Reaction Section BP) line D/S I/V Gland	537	-	Gland	0	0	0	0	0	0
538	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal U/S line	538	-	Flange	0	0	0	0	0	0
539	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal U/S line	539	-	Flange	0	0	0	0	0	0
540	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal U/S line	540	-	Flange	0	0	0	0	0	0
541	09-06-2025	NRV U/S Flange	541	-	Flange	0	0	0	0	0	0
542	09-06-2025	NRV Top Flange	542	-	Flange	0	0	0	0	0	0
543	09-06-2025	NRV D/S Flange	543	-	Flange	0	0	0	0	0	0
544	09-06-2025	Drain Line I/V Gland	544	-	Gland	0	0	0	0	0	0
545	09-06-2025	Drain Line Safety Flange	545	-	Flange	0	0	0	0	0	0
546	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal D/S line	546	-	Flange	0	0	0	0	0	0
547	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal D/S line	547	-	Flange	0	0	0	0	0	0
548	09-06-2025	Hydrogen From PSA To 15-KA-001 Seal D/S line	548	-	Flange	0	0	0	0	0	0
549	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	549	-	Flange	0	0	0	0	0	0
550	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	550	-	Flange	0	0	0	0	0	0
551	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	551	-	Flange	0	0	0	0	0	0
552	09-06-2025	NRV U/S Flange	552	-	Flange	0	0	0	0	0	0
553	09-06-2025	NRV Top Flange	553	-	Flange	0	0	0	0	0	0
554	09-06-2025	NRV D/S Flange	554	-	Flange	0	0	0	0	0	0
555	09-06-2025	Vrain Line I/V Gland	555	-	Gland	0	0	0	0	0	0
556	09-06-2025	Vrain Line Safety Flange	556	-	Flange	0	0	0	0	0	0
557	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	557	-	Flange	0	0	0	0	0	0
558	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	558	-	Flange	0	0	0	0	0	0
559	09-06-2025	From 16-KA-001 A/B To 15-KA-001 (Seal) line	559	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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560	09-06-2025	To-15-KA-001 Seal line U/S I/V U/S Flange	560	-	Flange	0	0	0	0	0	0
561	09-06-2025	To-15-KA-001 Seal line U/S I/V Gland	561	-	Gland	0	0	0	0	0	0
562	09-06-2025	To-15-KA-001 Seal line U/S I/V D/S Flange	562	-	Flange	0	0	0	0	0	0
563	09-06-2025	NRV U/S Flange	563	-	Flange	0	0	0	0	0	0
564	09-06-2025	NRV Top Flange	564	-	Flange	0	0	0	0	0	0
565	09-06-2025	NRV D/S Flange	565	-	Flange	0	0	0	0	0	0
566	09-06-2025	To-15-KA-001 Seal line D/S I/V U/S Flange	566	-	Flange	0	0	0	0	0	0
567	09-06-2025	To-15-KA-001 Seal line D/S I/V Gland	567	-	Gland	0	0	0	0	0	0
568	09-06-2025	To-15-KA-001 Seal line D/S I/V D/S Flange	568	-	Flange	0	0	0	0	0	0
569	09-06-2025	16-PA-CF-0011A Suction line I/V U/S Flange	569	-	Flange	0	0	0	0	0	0
570	09-06-2025	16-PA-CF-0011A Suction line I/V Gland	570	-	Gland	0	0	0	0	0	0
571	09-06-2025	16-PA-CF-0011A Suction line I/V D/S Flange	571	-	Flange	0	0	0	0	0	0
572	09-06-2025	Stainer Flange	572	-	Flange	0	0	0	0	0	0
573	09-06-2025	Drain Line 1st I/V Gland	573	-	Gland	0	0	0	0	0	0
574	09-06-2025	Stainer Flange	574	-	Flange	0	0	0	0	0	0
575	09-06-2025	Drain Line 2nd I/V Gland	575	-	Gland	0	0	0	0	0	0
576	09-06-2025	Suction Line Flange	576	-	Flange	0	0	0	0	0	0
577	09-06-2025	Pump Seal	577	-	P.seal	0	0	0	0	0	0
578	09-06-2025	Discharge Line Flange	578	-	Flange	0	0	0	0	0	0
579	09-06-2025	Drain Line I/V Gland	579	-	Gland	0	0	0	0	0	0
580	09-06-2025	Drain Line Safety Flange	580	-	Flange	0	0	0	0	0	0
581	09-06-2025	Meter line I/V Gland	581	-	Gland	0	0	0	0	0	0
582	09-06-2025	NRV U/S Flange	582	-	Flange	0	0	0	0	0	0
583	09-06-2025	NRV Top Flange	583	-	Flange	0	0	0	0	0	0
584	09-06-2025	NRV D/S Flange	584	-	Flange	0	0	0	0	0	0
585	09-06-2025	Drain Line 1st I/V Gland	585	-	Gland	0	0	0	0	0	0
586	09-06-2025	Drain Line 2nd I/V Gland	586	-	Gland	0	0	0	0	0	0
587	09-06-2025	OWS Point	587	-	Flange	0	0	0	0	0	0
588	09-06-2025	Suction line Outlet line to 1st I/V U/S Flange	588	-	Flange	0	0	0	0	0	0
589	09-06-2025	Suction line Outlet line to 1st I/V Gland	589	-	Gland	0	0	0	0	0	0
590	09-06-2025	Suction line Outlet line to 1st I/V D/S Flange	590	-	Flange	0	0	0	0	0	0
591	09-06-2025	Drain Line I/V Gland	591	-	Gland	0	0	0	0	0	0
592	09-06-2025	Drain Line Safety Flange	592	-	Flange	0	0	0	0	0	0
593	09-06-2025	Suction line Outlet line to 2nd I/V U/S Flange	593	-	Flange	0	0	0	0	0	0
594	09-06-2025	Suction line Outlet line to 2nd I/V Gland	594	-	Gland	0	0	0	0	0	0
595	09-06-2025	Suction line Outlet line to 2nd I/V D/S Flange	595	-	Flange	0	0	0	0	0	0
596	09-06-2025	16-PA-CF-0011B Suction line I/V U/S Flange	596	-	Flange	0	0	0	0	0	0
597	09-06-2025	16-PA-CF-0011B Suction line I/V Gland	597	-	Gland	0	0	0	0	0	0
598	09-06-2025	16-PA-CF-0011B Suction line I/V D/S Flange	598	-	Flange	0	0	0	0	0	0
599	09-06-2025	Stainer Top Flange	599	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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600	09-06-2025	Drain Line 1st I/V Gland	600	-	Gland	0	0	0	0	0	0
601	09-06-2025	Stainer Flange	601	-	Flange	0	0	0	0	0	0
602	09-06-2025	Drain Line 2nd I/V Gland	602	-	Gland	0	0	0	0	0	0
603	09-06-2025	Suction Line Flange	603	-	Flange	0	0	0	0	0	0
604	09-06-2025	Pump Seal	604	-	P.seal	0	0	0	0	0	0
605	09-06-2025	Discharge Line Flange	605	-	Flange	0	0	0	0	0	0
606	09-06-2025	Drain Line I/V Gland	606	-	Gland	0	0	0	0	0	0
607	09-06-2025	Drain Line Safety Flange	607	-	Flange	0	0	0	0	0	0
608	09-06-2025	P.G. Meter I/V Gland	608	-	Gland	0	0	0	0	0	0
609	09-06-2025	NRV U/S Flange	609	-	Flange	0	0	0	0	0	0
610	09-06-2025	NRV Top Flange	610	-	Flange	0	0	0	0	0	0
611	09-06-2025	NRV D/S Flange	611	-	Flange	0	0	0	0	0	0
612	09-06-2025	Drain Line 1st I/V Gland	612	-	Flange	0	0	0	0	0	0
613	09-06-2025	Drain Line 2nd I/V Gland	613	-	Flange	0	0	0	0	0	0
614	09-06-2025	OWS Point	614	-	Flange	0	0	0	0	0	0
615	09-06-2025	Discharge line I/V U/S Flange	615	-	Flange	0	0	0	0	0	0
616	09-06-2025	Discharge line I/V Gland	616	-	Gland	0	0	0	0	0	0
617	09-06-2025	Discharge line I/V D/S Flange	617	-	Flange	0	0	0	0	0	0
618	09-06-2025	Discharge line to Outlet line I/V Gland	618	-	Gland	0	0	0	0	0	0
619	09-06-2025	Discharge line to Outlet line Top Flange	619	-	Flange	0	0	0	0	0	0
620	09-06-2025	Drain Line I/V Gland	620	-	Gland	0	0	0	0	0	0
621	09-06-2025	Drain Line Safety Flange	621	-	Flange	0	0	0	0	0	0
622	09-06-2025	16-PA-CF-013A	622	-	Flange	0	0	0	0	0	0
623	09-06-2025	Suction line I/V U/S Flange	623	-	Flange	0	0	0	0	0	0
624	09-06-2025	Suction Line I/V Gland	624	-	Gland	0	0	0	0	0	0
625	09-06-2025	Suction line I/V D/S Flange	625	-	Flange	0	0	0	0	0	0
626	09-06-2025	Stainer Top Flange	626	-	Flange	0	0	0	0	0	0
627	09-06-2025	Suction line to Outlet line 1st I/V U/S Flange	627	-	Flange	0	0	0	0	0	0
628	09-06-2025	Suction line to Outlet line 1st I/V Gland	628	-	Gland	0	0	0	0	0	0
629	09-06-2025	Suction line to Outlet line 1st I/V D/S Flange	629	-	Flange	0	0	0	0	0	0
630	09-06-2025	Suction line to Outlet line 2nd I/V U/S Flange	630	-	Flange	0	0	0	0	0	0
631	09-06-2025	Suction line to Outlet line 2nd I/V Gland	631	-	Gland	0	0	0	0	0	0
632	09-06-2025	Suction line to Outlet line 2nd I/V D/S Flange	632	-	Flange	0	0	0	0	0	0
633	09-06-2025	Suction line to Outlet line 3rd I/V U/S Flange	633	-	Flange	0	0	0	0	0	0
634	09-06-2025	Suction line to Outlet line 3rd I/V Gland	634	-	Gland	0	0	0	0	0	0
635	09-06-2025	Suction line to Outlet line 3rd I/V D/S Flange	635	-	Flange	0	0	0	0	0	0
636	09-06-2025	OWS Point	636	-	Flange	0	0	0	0	0	0
637	09-06-2025	Drain Line 1st I/V Gland	637	-	Gland	0	0	0	0	0	0
638	09-06-2025	Steamer Flange	638	-	Flange	0	0	0	0	0	0
639	09-06-2025	Drain Line 2nd I/V Gland	639	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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640	09-06-2025	Suction Line Flange	640	-	Flange	0	0	0	0	0	0
641	09-06-2025	Discharge Line Flange	641	-	Flange	0	0	0	0	0	0
642	09-06-2025	P.G. Meter I/V Gland	642	-	Gland	0	0	0	0	0	0
643	09-06-2025	NRV U/S Flange	643	-	Flange	0	0	0	0	0	0
644	09-06-2025	NRV Top Flange	644	-	Flange	0	0	0	0	0	0
645	09-06-2025	NRV D/S Flange	645	-	Flange	0	0	0	0	0	0
646	09-06-2025	Drain Line 1st I/V Gland	646	-	Gland	0	0	0	0	0	0
647	09-06-2025	Drain Line 2nd I/V Gland	647	-	Gland	0	0	0	0	0	0
648	09-06-2025	OWS Point	648	-	Flange	0	0	0	0	0	0
649	09-06-2025	Discharge line I/V U/S Flange	649	-	Flange	0	0	0	0	0	0
650	09-06-2025	Discharge line I/V Gland	650	-	Gland	0	0	0	0	0	0
651	09-06-2025	Discharge line I/V D/S Flange	651	-	Flange	0	0	0	0	0	0
652	09-06-2025	16-PA-CF-013B	652	-	Flange	0	0	0	0	0	0
653	09-06-2025	Suction line I/V U/S Flange	653	-	Flange	0	0	0	0	0	0
654	09-06-2025	Suction Line I/V Gland	654	-	Gland	0	0	0	0	0	0
655	09-06-2025	Suction line I/V D/S Flange	655	-	Flange	0	0	0	0	0	0
656	09-06-2025	Stainer Top Flange	656	-	Flange	0	0	0	0	0	0
657	09-06-2025	Drain Line 1st I/V Gland	657	-	Gland	0	0	0	0	0	0
658	09-06-2025	Steamer Flange	658	-	Flange	0	0	0	0	0	0
659	09-06-2025	Drain Line 2nd I/V Gland	659	-	Gland	0	0	0	0	0	0
660	09-06-2025	Suction Line Flange	660	-	Flange	0	0	0	0	0	0
661	09-06-2025	Discharge Line Flange	661	-	Flange	0	0	0	0	0	0
662	09-06-2025	P.G. Meter I/V Gland	662	-	Gland	0	0	0	0	0	0
663	09-06-2025	NRV U/S Flange	663	-	Flange	0	0	0	0	0	0
664	09-06-2025	NRV Top Flange	664	-	Flange	0	0	0	0	0	0
665	09-06-2025	NRV D/S Flange	665	-	Flange	0	0	0	0	0	0
666	09-06-2025	Drain Line 1st I/V Gland	666	-	Gland	0	0	0	0	0	0
667	09-06-2025	Drain Line 2nd I/V Gland	667	-	Gland	0	0	0	0	0	0
668	09-06-2025	OWS Point	668	-	Flange	0	0	0	0	0	0
669	09-06-2025	Discharge line I/V U/S Flange	669	-	Flange	0	0	0	0	0	0
670	09-06-2025	Discharge line I/V Gland	670	-	Gland	0	0	0	0	0	0
671	09-06-2025	Discharge line I/V D/S Flange	671	-	Flange	0	0	0	0	0	0
672	09-06-2025	16-FV-2201 U/S line I/V U/S Flange	672	-	Flange	0	0	0	0	0	0
673	09-06-2025	16-FV-2201 U/S line I/V Gland	673	-	Gland	0	0	0	0	0	0
674	09-06-2025	16-FV-2201 U/S line I/V D/S Flange	674	-	Flange	0	0	0	0	0	0
675	09-06-2025	Drain Line I/V Gland	675	-	Gland	0	0	0	0	0	0
676	09-06-2025	16-FV-2201 C/V U/S Flange	676	-	Flange	0	0	0	0	0	0
677	09-06-2025	16-FV-2201 C/V Gland	677	-	Gland	0	0	0	0	0	0
678	09-06-2025	16-FV-2201 C/V D/S Flange	678	-	Flange	0	0	0	0	0	0
679	09-06-2025	Drain Line I/V Gland	679	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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680	09-06-2025	16-FV-2201 D/S line I/V U/S Flange	680	-	Flange	0	0	0	0	0	0
681	09-06-2025	16-FV-2201 D/S line I/V Gland	681	-	Gland	0	0	0	0	0	0
682	09-06-2025	16-FV-2201 D/S line I/V D/S Flange	682	-	Flange	0	0	0	0	0	0
683	09-06-2025	Bypass line I/V U/S Flange	683	-	Flange	0	0	0	0	0	0
684	09-06-2025	Bypass line I/V Gland	684	-	Gland	0	0	0	0	0	0
685	09-06-2025	Bypass line I/V D/S Flange	685	-	Flange	0	0	0	0	0	0
686	09-06-2025	16-FV-2103 U/S line I/V U/S Flange	686	-	Flange	0	0	0	0	0	0
687	09-06-2025	16-FV-2103 U/S line I/V Gland	687	-	Gland	0	0	0	0	0	0
688	09-06-2025	16-FV-2103 U/S line I/V D/S Flange	688	-	Flange	0	0	0	0	0	0
689	09-06-2025	Drain Line I/V Gland	689	-	Gland	0	0	0	0	0	0
690	09-06-2025	16-FV-2103 line C/V U/S Flange	690	-	Flange	0	0	0	0	0	0
691	09-06-2025	16-FV-2103 line C/V Gland	691	-	Gland	0	0	0	0	0	0
692	09-06-2025	16-FV-2103 line C/V D/S Flange	692	-	Flange	0	0	0	0	0	0
693	09-06-2025	Drain Line I/V Gland	693	-	Gland	0	0	0	0	0	0
694	09-06-2025	15-FV-2103 D/S line I/V U/S Flange	694	-	Flange	0	0	0	0	0	0
695	09-06-2025	15-FV-2103 D/S line I/V Gland	695	-	Gland	0	0	0	0	0	0
696	09-06-2025	15-FV-2103 D/S line I/V D/S Flange	696	-	Flange	0	0	0	0	0	0
697	09-06-2025	Bypass line I/V U/S Flange	697	-	Flange	0	0	0	0	0	0
698	09-06-2025	Bypass line I/V Gland	698	-	Gland	0	0	0	0	0	0
699	09-06-2025	Bypass line I/V D/S Flange	699	-	Flange	0	0	0	0	0	0
700	09-06-2025	16-FV-2205 U/S line I/V U/S Flange	700	-	Flange	0	0	0	0	0	0
701	09-06-2025	16-FV-2205 U/S line I/V Gland	701	-	Gland	0	0	0	0	0	0
702	09-06-2025	16-FV-2205 U/S line I/V D/S Flange	702	-	Flange	0	0	0	0	0	0
703	09-06-2025	Drain Line I/V Gland	703	-	Gland	0	0	0	0	0	0
704	09-06-2025	16-FV-2205 C/V U/S Flange	704	-	Flange	0	0	0	0	0	0
705	09-06-2025	16-FV-2205 C/V Gland	705	-	Gland	0	0	0	0	0	0
706	09-06-2025	16-FV-2205 C/V D/S Flange	706	-	Flange	0	0	0	0	0	0
707	09-06-2025	Drain Line I/V Gland	707	-	Gland	0	0	0	0	0	0
708	09-06-2025	16-FV-2205 D/S line I/V U/S Flange	708	-	Flange	0	0	0	0	0	0
709	09-06-2025	16-FV-2205 D/S line I/V Gland	709	-	Gland	0	0	0	0	0	0
710	09-06-2025	16-FV-2205 D/S line I/V D/S Flange	710	-	Flange	0	0	0	0	0	0
711	09-06-2025	Bypass line I/V U/S Flange	711	-	Flange	0	0	0	0	0	0
712	09-06-2025	Bypass line I/V Gland	712	-	Gland	0	0	0	0	0	0
713	09-06-2025	Bypass line I/V D/S Flange	713	-	Flange	0	0	0	0	0	0
714	09-06-2025	16-PA-CF-010A	714	-	Flange	0	0	0	0	0	0
715	09-06-2025	Suction line I/V U/S Flange	715	-	Flange	0	0	0	0	0	0
716	09-06-2025	Suction Line I/V Gland	716	-	Gland	0	0	0	0	0	0
717	09-06-2025	Suction line I/V D/S Flange	717	-	Flange	0	0	0	0	0	0
718	09-06-2025	Stainer Top Flange	718	-	Flange	0	0	0	0	0	0
719	09-06-2025	Suction line to Outlet line 1st I/V U/S Flange	719	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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720	09-06-2025	Suction line to Outlet line 1st I/V Gland	720	-	Gland	0	0	0	0	0	0
721	09-06-2025	Suction line to Outlet line 1st I/V D/S Flange	721	-	Flange	0	0	0	0	0	0
722	09-06-2025	Suction line to Outlet line 2nd I/V U/S Flange	722	-	Flange	0	0	0	0	0	0
723	09-06-2025	Suction line to Outlet line 2nd I/V Gland	723	-	Gland	0	0	0	0	0	0
724	09-06-2025	Suction line to Outlet line 2nd I/V D/S Flange	724	-	Flange	0	0	0	0	0	0
725	09-06-2025	Suction line to Outlet line 3rd I/V U/S Flange	725	-	Flange	0	0	0	0	0	0
726	09-06-2025	Suction line to Outlet line 3rd I/V Gland	726	-	Gland	0	0	0	0	0	0
727	09-06-2025	Suction line to Outlet line 3rd I/V D/S Flange	727	-	Flange	0	0	0	0	0	0
728	09-06-2025	OWS Point	728	-	Flange	0	0	0	0	0	0
729	09-06-2025	Drain Line 1st I/V Gland	729	-	Gland	0	0	0	0	0	0
730	09-06-2025	Steamer Flange	730	-	Flange	0	0	0	0	0	0
731	09-06-2025	Drain Line 2nd I/V Gland	731	-	Gland	0	0	0	0	0	0
732	09-06-2025	Suction Line Flange	732	-	Flange	0	0	0	0	0	0
733	09-06-2025	Pump Seal	733	-	p.seal	0	0	0	0	0	0
734	09-06-2025	Discharge Line Flange	734	-	Flange	0	0	0	0	0	0
735	09-06-2025	P.G. Meter I/V Gland	735	-	Gland	0	0	0	0	0	0
736	09-06-2025	NRV U/S Flange	736	-	Flange	0	0	0	0	0	0
737	09-06-2025	NRV Top Flange	737	-	Flange	0	0	0	0	0	0
738	09-06-2025	NRV D/S Flange	738	-	Flange	0	0	0	0	0	0
739	09-06-2025	Drain Line 1st I/V Gland	739	-	Gland	0	0	0	0	0	0
740	09-06-2025	Drain Line 2nd I/V Gland	740	-	Gland	0	0	0	0	0	0
741	09-06-2025	OWS Point	741	-	Flange	0	0	0	0	0	0
742	09-06-2025	Discharge line I/V U/S Flange	742	-	Flange	0	0	0	0	0	0
743	09-06-2025	Discharge line I/V Gland	743	-	Gland	0	0	0	0	0	0
744	09-06-2025	Discharge line I/V D/S Flange	744	-	Flange	0	0	0	0	0	0
745	09-06-2025	16-PA-CF-010B	745	-	Flange	0	0	0	0	0	0
746	09-06-2025	Suction line I/V U/S Flange	746	-	Flange	0	0	0	0	0	0
747	09-06-2025	Suction Line I/V Gland	747	-	Gland	0	0	0	0	0	0
748	09-06-2025	Suction line I/V D/S Flange	748	-	Flange	0	0	0	0	0	0
749	09-06-2025	Stainer Top Flange	749	-	Flange	0	0	0	0	0	0
750	09-06-2025	Drain Line 1st I/V Gland	750	-	Gland	0	0	0	0	0	0
751	09-06-2025	Steamer Flange	751	-	Flange	0	0	0	0	0	0
752	09-06-2025	Drain Line 2nd I/V Gland	752	-	Gland	0	0	0	0	0	0
753	09-06-2025	Suction Line Flange	753	-	Flange	0	0	0	0	0	0
754	09-06-2025	Pump Seal	754	-	p.seal	0	0	0	0	0	0
755	09-06-2025	Discharge Line Flange	755	-	Flange	0	0	0	0	0	0
756	09-06-2025	P.G. Meter I/V Gland	756	-	Gland	0	0	0	0	0	0
757	09-06-2025	NRV U/S Flange	757	-	Flange	0	0	0	0	0	0
758	09-06-2025	NRV Top Flange	758	-	Flange	0	0	0	0	0	0
759	09-06-2025	NRV D/S Flange	759	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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760	09-06-2025	Drain Line 1st I/V Gland	760	-	Gland	0	0	0	0	0	0
761	09-06-2025	Drain Line 2nd I/V Gland	761	-	Gland	0	0	0	0	0	0
762	09-06-2025	OWS Point	762	-	Flange	0	0	0	0	0	0
763	09-06-2025	Discharge line I/V U/S Flange	763	-	Flange	0	0	0	0	0	0
764	09-06-2025	Discharge line I/V Gland	764	-	Gland	0	0	0	0	0	0
765	09-06-2025	Discharge line I/V D/S Flange	765	-	Flange	0	0	0	0	0	0
766	09-06-2025	16-PA-CF-012A	766	-	Flange	0	0	0	0	0	0
767	09-06-2025	Suction line I/V U/S Flange	767	-	Flange	0	0	0	0	0	0
768	09-06-2025	Suction Line I/V Gland	768	-	Gland	0	0	0	0	0	0
769	09-06-2025	Suction line I/V D/S Flange	769	-	Flange	0	0	0	0	0	0
770	09-06-2025	Stainer Top Flange	770	-	Flange	0	0	0	0	0	0
771	09-06-2025	Drain Line 1st I/V Gland	771	-	Gland	0	0	0	0	0	0
772	09-06-2025	Steamer Flange	772	-	Flange	0	0	0	0	0	0
773	09-06-2025	Drain Line 2nd I/V Gland	773	-	Gland	0	0	0	0	0	0
774	09-06-2025	Suction Line Flange	774	-	Flange	0	0	0	0	0	0
775	09-06-2025	Discharge Line Flange	775	-	Flange	0	0	0	0	0	0
776	09-06-2025	Meter line I/V Gland	776	-	Gland	0	0	0	0	0	0
777	09-06-2025	Top Flange	777	-	Flange	0	0	0	0	0	0
778	09-06-2025	Drain Line 1st I/V Gland	778	-	Gland	0	0	0	0	0	0
779	09-06-2025	Drain Line 2nd I/V Gland	779	-	Gland	0	0	0	0	0	0
780	09-06-2025	OWS Point	780	-	Flange	0	0	0	0	0	0
781	09-06-2025	Discharge line I/V Gland	781	-	Gland	0	0	0	0	0	0
782	09-06-2025	16-PA-CF-012B	782	-	Flange	0	0	0	0	0	0
783	09-06-2025	Suction line I/V U/S Flange	783	-	Flange	0	0	0	0	0	0
784	09-06-2025	Suction Line I/V Gland	784	-	Gland	0	0	0	0	0	0
785	09-06-2025	Suction line I/V D/S Flange	785	-	Flange	0	0	0	0	0	0
786	09-06-2025	Stainer Top Flange	786	-	Flange	0	0	0	0	0	0
787	09-06-2025	Drain Line 1st I/V Gland	787	-	Gland	0	0	0	0	0	0
788	09-06-2025	Steamer Flange	788	-	Flange	0	0	0	0	0	0
789	09-06-2025	Drain Line 2nd I/V Gland	789	-	Gland	0	0	0	0	0	0
790	09-06-2025	Suction Line Flange	790	-	Flange	0	0	0	0	0	0
791	09-06-2025	Discharge Line Flange	791	-	Flange	0	0	0	0	0	0
792	09-06-2025	Meter line I/V Gland	792	-	Gland	0	0	0	0	0	0
793	09-06-2025	Top Flange	793	-	Flange	0	0	0	0	0	0
794	09-06-2025	Drain Line 1st I/V Gland	794	-	Gland	0	0	0	0	0	0
795	09-06-2025	Drain Line 2nd I/V Gland	795	-	Gland	0	0	0	0	0	0
796	09-06-2025	OWS Point	796	-	Flange	0	0	0	0	0	0
797	09-06-2025	Discharge line I/V Gland	797	-	Gland	0	0	0	0	0	0
798	09-06-2025	16-FV-2204 D/S line I/V Gland	798	-	Gland	0	0	0	0	0	0
799	09-06-2025	Drain Line 1st I/V Gland	799	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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800	09-06-2025	Stainer Flange	800	-	Flange	0	0	0	0	0	0
801	09-06-2025	Drain Line 2nd I/V Gland	801	-	Gland	0	0	0	0	0	0
802	09-06-2025	16-FV-2204 line C/V U/S Flange	802	-	Flange	0	0	0	0	0	0
803	09-06-2025	16-FV-2204 line C/V Gland	803	-	Gland	0	0	0	0	0	0
804	09-06-2025	16-FV-2204 line C/V D/S Flange	804	-	Flange	0	0	0	0	0	0
805	09-06-2025	Drain Line I/V Gland	805	-	Gland	0	0	0	0	0	0
806	09-06-2025	D/S line I/V Gland	806	-	Gland	0	0	0	0	0	0
807	09-06-2025	Bypass line I/V Gland	807	-	Gland	0	0	0	0	0	0
808	09-06-2025	16-FV-2206 U/S line I/V Gland	808	-	Gland	0	0	0	0	0	0
809	09-06-2025	Drain Line 1st I/V Gland	809	-	Gland	0	0	0	0	0	0
810	09-06-2025	Stainer Flange	810	-	Flange	0	0	0	0	0	0
811	09-06-2025	Drain Line 2nd I/V Gland	811	-	Gland	0	0	0	0	0	0
812	09-06-2025	16-FV-2206 C/V U/S Flange	812	-	Flange	0	0	0	0	0	0
813	09-06-2025	16-FV-2206 C/V Gland	813	-	Gland	0	0	0	0	0	0
814	09-06-2025	16-FV-2206 C/V D/S Flange	814	-	Flange	0	0	0	0	0	0
815	09-06-2025	Drain Line I/V Gland	815	-	Gland	0	0	0	0	0	0
816	09-06-2025	D/S line I/V Gland	816	-	Gland	0	0	0	0	0	0
817	09-06-2025	Bypass line Stainer Flange	817	-	Flange	0	0	0	0	0	0
818	09-06-2025	Bypass line I/V Gland	818	-	Gland	0	0	0	0	0	0
819	09-06-2025	16-PA-CF-006A	819	-	Flange	0	0	0	0	0	0
820	09-06-2025	Suction line I/V U/S Flange	820	-	Flange	0	0	0	0	0	0
821	09-06-2025	Suction Line I/V Gland	821	-	Gland	0	0	0	0	0	0
822	09-06-2025	Suction line I/V D/S Flange	822	-	Flange	0	0	0	0	0	0
823	09-06-2025	Stainer Top Flange	823	-	Flange	0	0	0	0	0	0
824	09-06-2025	Drain Line 1st I/V Gland	824	-	Gland	0	0	0	0	0	0
825	09-06-2025	Steamer Flange	825	-	Flange	0	0	0	0	0	0
826	09-06-2025	Drain Line 2nd I/V Gland	826	-	Gland	0	0	0	0	0	0
827	09-06-2025	Suction Line Flange	827	-	Flange	0	0	0	0	0	0
828	09-06-2025	Pump Seal	828	-	p.seal	0	0	0	0	0	0
829	09-06-2025	Discharge Line Flange	829	-	Flange	0	0	0	0	0	0
830	09-06-2025	Vrain Line I/V Gland	830	-	Gland	0	0	0	0	0	0
831	09-06-2025	Vrain Line Safety Flange	831	-	Flange	0	0	0	0	0	0
832	09-06-2025	Meter line I/V Gland	832	-	Gland	0	0	0	0	0	0
833	09-06-2025	NRV U/S Flange	833	-	Flange	0	0	0	0	0	0
834	09-06-2025	NRV Top Flange	834	-	Flange	0	0	0	0	0	0
835	09-06-2025	NRV D/S Flange	835	-	Flange	0	0	0	0	0	0
836	09-06-2025	Drain Line 1st I/V Gland	836	-	Gland	0	0	0	0	0	0
837	09-06-2025	Drain Line 2nd I/V Gland	837	-	Gland	0	0	0	0	0	0
838	09-06-2025	OWS Point	838	-	Flange	0	0	0	0	0	0
839	09-06-2025	Discharge line I/V U/S Flange	839	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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840	09-06-2025	Discharge line I/V Gland	840	-	Gland	0	0	0	0	0	0
841	09-06-2025	Discharge line I/V D/S Flange	841	-	Flange	0	0	0	0	0	0
842	09-06-2025	16-PA-CF-006B	842	-	Flange	0	0	0	0	0	0
843	09-06-2025	Suction line I/V U/S Flange	843	-	Flange	0	0	0	0	0	0
844	09-06-2025	Suction Line I/V Gland	844	-	Gland	0	0	0	0	0	0
845	09-06-2025	Suction line I/V D/S Flange	845	-	Flange	0	0	0	0	0	0
846	09-06-2025	Stainer Top Flange	846	-	Flange	0	0	0	0	0	0
847	09-06-2025	Drain Line 1st I/V Gland	847	-	Gland	0	0	0	0	0	0
848	09-06-2025	Steamer Flange	848	-	Flange	0	0	0	0	0	0
849	09-06-2025	Drain Line 2nd I/V Gland	849	-	Gland	0	0	0	0	0	0
850	09-06-2025	Suction Line Flange	850	-	Flange	0	0	0	0	0	0
851	09-06-2025	Pump Seal	851	-	p.seal	0	0	0	0	0	0
852	09-06-2025	Discharge Line Flange	852	-	Flange	0	0	0	0	0	0
853	09-06-2025	Vrain line I/V Gland	853	-	Gland	0	0	0	0	0	0
854	09-06-2025	Vrain Line Safety Flange	854	-	Flange	0	0	0	0	0	0
855	09-06-2025	Meter line I/V Gland	855	-	Gland	0	0	0	0	0	0
856	09-06-2025	NRV U/S Flange	856	-	Flange	0	0	0	0	0	0
857	09-06-2025	NRV Top Flange	857	-	Flange	0	0	0	0	0	0
858	09-06-2025	NRV D/S Flange	858	-	Flange	0	0	0	0	0	0
859	09-06-2025	Drain Line 1st I/V Gland	859	-	Gland	0	0	0	0	0	0
860	09-06-2025	Drain Line 2nd I/V Gland	860	-	Gland	0	0	0	0	0	0
861	09-06-2025	OWS Point	861	-	Flange	0	0	0	0	0	0
862	09-06-2025	Discharge line I/V U/S Flange	862	-	Flange	0	0	0	0	0	0
863	09-06-2025	Discharge line I/V Gland	863	-	Gland	0	0	0	0	0	0
864	09-06-2025	Discharge line I/V D/S Flange	864	-	Flange	0	0	0	0	0	0
865	09-06-2025	MIN FLOW to 16-VV-06 U/S line I/V U/S Flange	865	-	Flange	0	0	0	0	0	0
866	09-06-2025	MIN FLOW to 16-VV-06 U/S line I/V Gland	866	-	Gland	0	0	0	0	0	0
867	09-06-2025	MIN FLOW to 16-VV-06 U/S line I/V D/S Flange	867	-	Flange	0	0	0	0	0	0
868	09-06-2025	NRV U/S Flange	868	-	Flange	0	0	0	0	0	0
869	09-06-2025	NRV Top Flange	869	-	Flange	0	0	0	0	0	0
870	09-06-2025	NRV D/S Flange	870	-	Flange	0	0	0	0	0	0
871	09-06-2025	Drain Line I/V Gland	871	-	Gland	0	0	0	0	0	0
872	09-06-2025	Drain Line Safety Flange	872	-	Flange	0	0	0	0	0	0
873	09-06-2025	Heavy Reformate to Storage U/S line I/V Gland	873	-	Gland	0	0	0	0	0	0
874	09-06-2025	Top Flange	874	-	Flange	0	0	0	0	0	0
875	09-06-2025	Drain Line I/V Gland	875	-	Gland	0	0	0	0	0	0
876	09-06-2025	Drain Line Safety Flange	876	-	Flange	0	0	0	0	0	0
877	09-06-2025	D/S line Stainer Flange	877	-	Flange	0	0	0	0	0	0
878	09-06-2025	D/S line I/V Gland	878	-	Gland	0	0	0	0	0	0
879	09-06-2025	16-PV-2102 U/S line I/V Gland	879	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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880	09-06-2025	Drain Line I/V Gland	880	-	Gland	0	0	0	0	0	0
881	09-06-2025	16-PV-2102 line C/V U/S Flange	881	-	Flange	0	0	0	0	0	0
882	09-06-2025	16-PV-2102 line C/V Gland	882	-	Gland	0	0	0	0	0	0
883	09-06-2025	16-PV-2102 line C/V D/S Flange	883	-	Flange	0	0	0	0	0	0
884	09-06-2025	Drain Line I/V Gland	884	-	Gland	0	0	0	0	0	0
885	09-06-2025	D/S line I/V Gland	885	-	Gland	0	0	0	0	0	0
886	09-06-2025	Bypass line Stainer Flange	886	-	Flange	0	0	0	0	0	0
887	09-06-2025	Bypass line I/V Gland	887	-	Gland	0	0	0	0	0	0
888	09-06-2025	16-PA-CF-003A	888	-	Flange	0	0	0	0	0	0
889	09-06-2025	Suction line I/V U/S Flange	889	-	Flange	0	0	0	0	0	0
890	09-06-2025	Suction line I/V Gland	890	-	Gland	0	0	0	0	0	0
891	09-06-2025	Suction line I/V D/S Flange	891	-	Flange	0	0	0	0	0	0
892	09-06-2025	Stainer Top Flange	892	-	Flange	0	0	0	0	0	0
893	09-06-2025	Suction line to Outlet line 1st I/V U/S Flange	893	-	Flange	0	0	0	0	0	0
894	09-06-2025	Suction line to Outlet line 1st I/V Gland	894	-	Gland	0	0	0	0	0	0
895	09-06-2025	Suction line to Outlet line 1st I/V D/S Flange	895	-	Flange	0	0	0	0	0	0
896	09-06-2025	Suction line to Outlet line 2nd I/V U/S Flange	896	-	Flange	0	0	0	0	0	0
897	09-06-2025	Suction line to Outlet line 2nd I/V Gland	897	-	Gland	0	0	0	0	0	0
898	09-06-2025	Suction line to Outlet line 2nd I/V D/S Flange	898	-	Flange	0	0	0	0	0	0
899	09-06-2025	Vrain line I/V Gland	899	-	Gland	0	0	0	0	0	0
900	09-06-2025	Vrain Line Safety Flange	900	-	Flange	0	0	0	0	0	0
901	09-06-2025	Suction line to Outlet line 3rd I/V U/S Flange	901	-	Flange	0	0	0	0	0	0
902	09-06-2025	Suction line to Outlet line 3rd I/V Gland	902	-	Gland	0	0	0	0	0	0
903	09-06-2025	Suction line to Outlet line 3rd I/V D/S Flange	903	-	Flange	0	0	0	0	0	0
904	09-06-2025	Drain Line 1st I/V Gland	904	-	Gland	0	0	0	0	0	0
905	09-06-2025	Drain Line 2nd I/V Gland	905	-	Gland	0	0	0	0	0	0
906	09-06-2025	Steamer Flange	906	-	Flange	0	0	0	0	0	0
907	09-06-2025	Suction Line Flange	907	-	Flange	0	0	0	0	0	0
908	09-06-2025	Discharge Line Flange	908	-	Flange	0	0	0	0	0	0
909	09-06-2025	P.G. Meter I/V Gland	909	-	Gland	0	0	0	0	0	0
910	09-06-2025	Meter line to Drain line I/V Gland	910	-	Gland	0	0	0	0	0	0
911	09-06-2025	Meter line to Drain line Safety Flange	911	-	Flange	0	0	0	0	0	0
912	09-06-2025	NRV U/S Flange	912	-	Flange	0	0	0	0	0	0
913	09-06-2025	NRV Top Flange	913	-	Flange	0	0	0	0	0	0
914	09-06-2025	NRV D/S Flange	914	-	Flange	0	0	0	0	0	0
915	09-06-2025	Drain Line 1st I/V Gland	915	-	Gland	0	0	0	0	0	0
916	09-06-2025	Drain Line 2nd I/V Gland	916	-	Gland	0	0	0	0	0	0
917	09-06-2025	OWS Point	917	-	Flange	0	0	0	0	0	0
918	09-06-2025	Discharge line I/V U/S Flange	918	-	Flange	0	0	0	0	0	0
919	09-06-2025	Discharge line I/V Gland	919	-	Gland	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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920	09-06-2025	Discharge line I/V D/S Flange	920	-	Flange	0	0	0	0	0	0
921	09-06-2025	16-PA-CF-003B	921	-	Flange	0	0	0	0	0	0
922	09-06-2025	Suction line I/V U/S Flange	922	-	Flange	0	0	0	0	0	0
923	09-06-2025	Suction Line I/V Gland	923	-	Gland	0	0	0	0	0	0
924	09-06-2025	Suction line I/V D/S Flange	924	-	Flange	0	0	0	0	0	0
925	09-06-2025	Stainer Top Flange	925	-	Flange	0	0	0	0	0	0
926	09-06-2025	Drain Line 1st I/V Gland	926	-	Gland	0	0	0	0	0	0
927	09-06-2025	Steamer Flange	927	-	Flange	0	0	0	0	0	0
928	09-06-2025	Drain Line 2nd I/V Gland	928	-	Gland	0	0	0	0	0	0
929	09-06-2025	Suction Line Flange	929	-	Flange	0	0	0	0	0	0
930	09-06-2025	Discharge Line Flange	930	-	Flange	0	0	0	0	0	0
931	09-06-2025	Meter line I/V Gland	931	-	Gland	0	0	0	0	0	0
932	09-06-2025	Meter line to Drain line I/V Gland	932	-	Flange	0	0	0	0	0	0
933	09-06-2025	Meter line to Drain line Safety Flange	933	-	Flange	0	0	0	0	0	0
934	09-06-2025	NRV U/S Flange	934	-	Flange	0	0	0	0	0	0
935	09-06-2025	NRV Top Flange	935	-	Flange	0	0	0	0	0	0
936	09-06-2025	NRV D/S Flange	936	-	Flange	0	0	0	0	0	0
937	09-06-2025	Drain Line 1st I/V Gland	937	-	Gland	0	0	0	0	0	0
938	09-06-2025	Drain Line 2nd I/V Gland	938	-	Gland	0	0	0	0	0	0
939	09-06-2025	OWS Point	939	-	Flange	0	0	0	0	0	0
940	09-06-2025	Discharge line I/V U/S Flange	940	-	Flange	0	0	0	0	0	0
941	09-06-2025	Discharge line I/V Gland	941	-	Gland	0	0	0	0	0	0
942	09-06-2025	Discharge line I/V D/S Flange	942	-	Flange	0	0	0	0	0	0
943	09-06-2025	16-FV-1803 U/S line I/V Gland	943	-	Gland	0	0	0	0	0	0
944	09-06-2025	Drain Line I/V Gland	944	-	Gland	0	0	0	0	0	0
945	09-06-2025	16-FV-1803 C/V U/S Flange	945	-	Flange	0	0	0	0	0	0
946	09-06-2025	16-FV-1803 C/V Gland	946	-	Gland	0	0	0	0	0	0
947	09-06-2025	16-FV-1803 C/V D/S Flange	947	-	Flange	0	0	0	0	0	0
948	09-06-2025	Drain Line I/V Gland	948	-	Gland	0	0	0	0	0	0
949	09-06-2025	D/S line I/V Gland	949	-	Gland	0	0	0	0	0	0
950	09-06-2025	Bypass line I/V Gland	950	-	Gland	0	0	0	0	0	0
951	09-06-2025	16-FV-1802 D/S line I/V U/S Flange	951	-	Flange	0	0	0	0	0	0
952	09-06-2025	16-FV-1802 D/S line I/V Gland	952	-	Gland	0	0	0	0	0	0
953	09-06-2025	16-FV-1802 D/S line I/V D/S Flange	953	-	Flange	0	0	0	0	0	0
954	09-06-2025	Drain Line I/V Gland	954	-	Gland	0	0	0	0	0	0
955	09-06-2025	16-FV-1802 C/V U/S Flange	955	-	Flange	0	0	0	0	0	0
956	09-06-2025	16-FV-1802 C/V Gland	956	-	Gland	0	0	0	0	0	0
957	09-06-2025	16-FV-1802 C/V D/S Flange	957	-	Flange	0	0	0	0	0	0
958	09-06-2025	Drain Line I/V Gland	958	-	Gland	0	0	0	0	0	0
959	09-06-2025	16-FV-1802 D/S line I/V U/S Flange	959	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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960	09-06-2025	16-FV-1802 D/S line I/V Gland	960	-	Gland	0	0	0	0	0	0
961	09-06-2025	16-FV-1802 D/S line I/V D/S Flange	961	-	Flange	0	0	0	0	0	0
962	09-06-2025	Bypass line I/V U/S Flange	962	-	Flange	0	0	0	0	0	0
963	09-06-2025	Bypass line I/V Gland	963	-	Gland	0	0	0	0	0	0
964	09-06-2025	Bypass line I/V D/S Flange	964	-	Flange	0	0	0	0	0	0
965	09-06-2025	16-PA-CF-005A	965	-	Flange	0	0	0	0	0	0
966	09-06-2025	Suction line I/V U/S Flange	966	-	Flange	0	0	0	0	0	0
967	09-06-2025	Suction line I/V Gland	967	-	Gland	0	0	0	0	0	0
968	09-06-2025	Suction line I/V D/S Flange	968	-	Flange	0	0	0	0	0	0
969	09-06-2025	Stainer Top Flange	969	-	Flange	0	0	0	0	0	0
970	09-06-2025	Drain Line I/V Gland	970	-	Gland	0	0	0	0	0	0
971	09-06-2025	Suction Line Flange	971	-	Flange	0	0	0	0	0	0
972	09-06-2025	Discharge Line Flange	972	-	Flange	0	0	0	0	0	0
973	09-06-2025	Meter line I/V Gland	973	-	Gland	0	0	0	0	0	0
974	09-06-2025	Top Flange	974	-	Flange	0	0	0	0	0	0
975	09-06-2025	Drain Line 1st I/V Gland	975	-	Gland	0	0	0	0	0	0
976	09-06-2025	Steamer Flange	976	-	Flange	0	0	0	0	0	0
977	09-06-2025	Drain Line 2nd I/V Gland	977	-	Gland	0	0	0	0	0	0
978	09-06-2025	OWS Point	978	-	Flange	0	0	0	0	0	0
979	09-06-2025	Discharge line I/V Gland	979	-	Gland	0	0	0	0	0	0
980	09-06-2025	16-PA-CF-005B	980	-	Flange	0	0	0	0	0	0
981	09-06-2025	Suction line I/V U/S Flange	981	-	Flange	0	0	0	0	0	0
982	09-06-2025	Suction line I/V Gland	982	-	Gland	0	0	0	0	0	0
983	09-06-2025	Suction line I/V D/S Flange	983	-	Flange	0	0	0	0	0	0
984	09-06-2025	Stainer Top Flange	984	-	Flange	0	0	0	0	0	0
985	09-06-2025	Drain Line I/V Gland	985	-	Gland	0	0	0	0	0	0
986	09-06-2025	Suction Line Flange	986	-	Flange	0	0	0	0	0	0
987	09-06-2025	Discharge Line Flange	987	-	Flange	0	0	0	0	0	0
988	09-06-2025	P.G. Meter I/V Gland	988	-	Gland	0	0	0	0	0	0
989	09-06-2025	Drain Line 1st I/V Gland	989	-	Gland	0	0	0	0	0	0
990	09-06-2025	Steamer Flange	990	-	Flange	0	0	0	0	0	0
991	09-06-2025	Drain Line 2nd I/V Gland	991	-	Gland	0	0	0	0	0	0
992	09-06-2025	OWS Point	992	-	Flange	0	0	0	0	0	0
993	09-06-2025	Top Flange	993	-	Flange	0	0	0	0	0	0
994	09-06-2025	Discharge line I/V Gland	994	-	Gland	0	0	0	0	0	0
995	09-06-2025	16-PV-2301 U/S line I/V U/S Flange	995	-	Flange	0	0	0	0	0	0
996	09-06-2025	16-PV-2301 U/S line I/V Gland	996	-	Gland	0	0	0	0	0	0
997	09-06-2025	16-PV-2301 U/S line I/V D/S Flange	997	-	Flange	0	0	0	0	0	0
998	09-06-2025	Drain Line 1st I/V Gland	998	-	Gland	0	0	0	0	0	0
999	09-06-2025	Stainer Flange	999	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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1000	09-06-2025	Drain Line 2nd I/V Gland	1000	-	Gland	0	0	0	0	0	0
1001	09-06-2025	Drain Line 3rd I/V Gland	1001	-	Gland	0	0	0	0	0	0
1002	09-06-2025	16-PV-2301 C/V U/S Flange	1002	-	Flange	0	0	0	0	0	0
1003	09-06-2025	16-PV-2301 C/V Gland	1003	-	Gland	0	0	0	0	0	0
1004	09-06-2025	16-PV-2301 C/V D/S Flange	1004	-	Flange	0	0	0	0	0	0
1005	09-06-2025	Drain Line I/V Gland	1005	-	Gland	0	0	0	0	0	0
1006	09-06-2025	16-PV-2301 D/S line I/V U/S Flange	1006	-	Flange	0	0	0	0	0	0
1007	09-06-2025	16-PV-2301 D/S line I/V Gland	1007	-	Gland	0	0	0	0	0	0
1008	09-06-2025	16-PV-2301 D/S line I/V D/S Flange	1008	-	Flange	0	0	0	0	0	0
1009	09-06-2025	Bypass line I/V U/S Flange	1009	-	Flange	0	0	0	0	0	0
1010	09-06-2025	Bypass line I/V Gland	1010	-	Gland	0	0	0	0	0	0
1011	09-06-2025	Bypass line I/V D/S Flange	1011	-	Flange	0	0	0	0	0	0
1012	09-06-2025	16-FV-1701 U/S line I/V U/S Flange	1012	-	Flange	0	0	0	0	0	0
1013	09-06-2025	16-FV-1701 U/S line I/V Gland	1013	-	Gland	0	0	0	0	0	0
1014	09-06-2025	16-FV-1701 U/S line I/V D/S Flange	1014	-	Flange	0	0	0	0	0	0
1015	09-06-2025	16-FV-1701 C/V U/S Flange	1015	-	Flange	0	0	0	0	0	0
1016	09-06-2025	16-FV-1701 C/V Gland	1016	-	Gland	0	0	0	0	0	0
1017	09-06-2025	16-FV-1701 C/V D/S Flange	1017	-	Flange	0	0	0	0	0	0
1018	09-06-2025	16-FV-1701 D/S line I/V U/S Flange	1018	-	Flange	0	0	0	0	0	0
1019	09-06-2025	16-FV-1701 D/S line I/V Gland	1019	-	Gland	0	0	0	0	0	0
1020	09-06-2025	16-FV-1701 D/S line I/V D/S Flange	1020	-	Flange	0	0	0	0	0	0
1021	09-06-2025	Bypass line I/V U/S Flange	1021	-	Flange	0	0	0	0	0	0
1022	09-06-2025	Bypass line I/V Gland	1022	-	Gland	0	0	0	0	0	0
1023	09-06-2025	Bypass line I/V D/S Flange	1023	-	Flange	0	0	0	0	0	0
1024	09-06-2025	16-FV-1102 U/S line I/V U/S Flange	1024	-	Flange	0	0	0	0	0	0
1025	09-06-2025	16-FV-1102 U/S line I/V Gland	1025	-	Gland	0	0	0	0	0	0
1026	09-06-2025	16-FV-1102 U/S line I/V D/S Flange	1026	-	Flange	0	0	0	0	0	0
1027	09-06-2025	Drain Line 1st I/V Gland	1027	-	Gland	0	0	0	0	0	0
1028	09-06-2025	Stainer Flange	1028	-	Flange	0	0	0	0	0	0
1029	09-06-2025	Drain Line 2nd I/V Gland	1029	-	Gland	0	0	0	0	0	0
1030	09-06-2025	16-FV-1102 C/V U/S Flange	1030	-	Flange	0	0	0	0	0	0
1031	09-06-2025	16-FV-1102 C/V Gland	1031	-	Gland	0	0	0	0	0	0
1032	09-06-2025	16-FV-1102 C/V D/S Flange	1032	-	Flange	0	0	0	0	0	0
1033	09-06-2025	Drain Line I/V Gland	1033	-	Gland	0	0	0	0	0	0
1034	09-06-2025	16-FV-1102 D/S line I/V U/S Flange	1034	-	Flange	0	0	0	0	0	0
1035	09-06-2025	16-FV-1102 D/S line I/V Gland	1035	-	Gland	0	0	0	0	0	0
1036	09-06-2025	16-FV-1102 D/S line I/V D/S Flange	1036	-	Flange	0	0	0	0	0	0
1037	09-06-2025	Bypass line I/V U/S Flange	1037	-	Flange	0	0	0	0	0	0
1038	09-06-2025	Bypass line I/V Gland	1038	-	Gland	0	0	0	0	0	0
1039	09-06-2025	Bypass line I/V D/S Flange	1039	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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1040	09-06-2025	16-FV-1703 U/S line I/V Gland	1040	-	Gland	0	0	0	0	0	0
1041	09-06-2025	Drain Line I/V Gland	1041	-	Gland	0	0	0	0	0	0
1042	09-06-2025	16-FV-1703 C/V U/S Flange	1042	-	Flange	0	0	0	0	0	0
1043	09-06-2025	16-FV-1703 C/V Glande	1043	-	Gland	0	0	0	0	0	0
1044	09-06-2025	16-FV-1703 C/V D/S Flange	1044	-	Flange	0	0	0	0	0	0
1045	09-06-2025	Drain Line 1st I/V Gland	1045	-	Gland	0	0	0	0	0	0
1046	09-06-2025	Stainer Flange	1046	-	Flange	0	0	0	0	0	0
1047	09-06-2025	Drain Line 2nd I/V Gland	1047	-	Gland	0	0	0	0	0	0
1048	09-06-2025	16-FV-1703 D/S line I/V Gland	1048	-	Flange	0	0	0	0	0	0
1049	09-06-2025	Bypass line I/V Gland	1049	-	Gland	0	0	0	0	0	0
1050	09-06-2025	16-PA-CF-001A	1050	-	Flange	0	0	0	0	0	0
1051	09-06-2025	Suction line I/V U/S Flange	1051	-	Flange	0	0	0	0	0	0
1052	09-06-2025	Suction line I/V Gland	1052	-	Gland	0	0	0	0	0	0
1053	09-06-2025	Suction line I/V D/S Flange	1053	-	Flange	0	0	0	0	0	0
1054	09-06-2025	Stainer Top Flange	1054	-	Flange	0	0	0	0	0	0
1055	09-06-2025	Drain Line 1st I/V Gland	1055	-	Gland	0	0	0	0	0	0
1056	09-06-2025	Drain Line 2nd I/V Gland	1056	-	Gland	0	0	0	0	0	0
1057	09-06-2025	OWS Point	1057	-	Flange	0	0	0	0	0	0
1058	09-06-2025	Suction Line Flange	1058	-	Flange	0	0	0	0	0	0
1059	09-06-2025	Pump Seal	1059	-	p.seal	0	0	0	0	0	0
1060	09-06-2025	Discharge Line Flange	1060	-	Flange	0	0	0	0	0	0
1061	09-06-2025	P.G. Meter line I/V Gland	1061	-	Gland	0	0	0	0	0	0
1062	09-06-2025	NRV U/S Flange	1062	-	Flange	0	0	0	0	0	0
1063	09-06-2025	NRV Top Flange	1063	-	Flange	0	0	0	0	0	0
1064	09-06-2025	NRV D/S Flange	1064	-	Flange	0	0	0	0	0	0
1065	09-06-2025	Steamer Flange	1065	-	Flange	0	0	0	0	0	0
1066	09-06-2025	Drain Line 1st I/V Gland	1066	-	Gland	0	0	0	0	0	0
1067	09-06-2025	Steamer Flange	1067	-	Flange	0	0	0	0	0	0
1068	09-06-2025	Drain Line 2nd I/V Gland	1068	-	Gland	0	0	0	0	0	0
1069	09-06-2025	Discharge line I/V U/S Flange	1069	-	Flange	0	0	0	0	0	0
1070	09-06-2025	Discharge line I/V Gland	1070	-	Gland	0	0	0	0	0	0
1071	09-06-2025	Discharge line I/V D/S Flange	1071	-	Flange	0	0	0	0	0	0
1072	09-06-2025	16-PA-CF-001B	1072	-	Flange	0	0	0	0	0	0
1073	09-06-2025	Suction line I/V U/S Flange	1073	-	Flange	0	0	0	0	0	0
1074	09-06-2025	Suction line I/V Gland	1074	-	Gland	0	0	0	0	0	0
1075	09-06-2025	Suction line I/V D/S Flange	1075	-	Flange	0	0	0	0	0	0
1076	09-06-2025	Stainer Top Flange	1076	-	Flange	0	0	0	0	0	0
1077	09-06-2025	Drain Line 1st I/V Gland	1077	-	Gland	0	0	0	0	0	0
1078	09-06-2025	Drain Line 2nd I/V Gland	1078	-	Gland	0	0	0	0	0	0
1079	09-06-2025	OWS Point	1079	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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1080	09-06-2025	Suction Line Flange	1080	-	Flange	0	0	0	0	0	0
1081	09-06-2025	Pump Seal	1081	-	p.seal	0	0	0	0	0	0
1082	09-06-2025	Discharge Line Flange	1082	-	Flange	0	0	0	0	0	0
1083	09-06-2025	P.G. Meter line I/V Gland	1083	-	Gland	0	0	0	0	0	0
1084	09-06-2025	NRV U/S Flange	1084	-	Flange	0	0	0	0	0	0
1085	09-06-2025	NRV Top Flange	1085	-	Flange	0	0	0	0	0	0
1086	09-06-2025	NRV D/S Flange	1086	-	Flange	0	0	0	0	0	0
1087	09-06-2025	Drain Line 1st I/V Gland	1087	-	Gland	0	0	0	0	0	0
1088	09-06-2025	Steamer Flange	1088	-	Flange	0	0	0	0	0	0
1089	09-06-2025	Drain Line 2nd I/V Gland	1089	-	Gland	0	0	0	0	0	0
1090	09-06-2025	Discharge line I/V U/S Flange	1090	-	Flange	0	0	0	0	0	0
1091	09-06-2025	Discharge line I/V Gland	1091	-	Gland	0	0	0	0	0	0
1092	09-06-2025	Discharge line I/V D/S Flange	1092	-	Flange	0	0	0	0	0	0
1093	09-06-2025	From FEED DRYER line D/S I/V U/S Gland	1093	-	Gland	0	0	0	0	0	0
1094	09-06-2025	Top Flange	1094	-	Flange	0	0	0	0	0	0
1095	09-06-2025	Stainer Flange	1095	-	Flange	0	0	0	0	0	0
1096	09-06-2025	D/S line I/V Gland	1096	-	Gland	0	0	0	0	0	0
1097	09-06-2025	Drain Line I/V Gland	1097	-	Gland	0	0	0	0	0	0
1098	09-06-2025	Drain Line Safety Flange	1098	-	Flange	0	0	0	0	0	0
1099	09-06-2025	From 16-C-01 Bottom line 1st I/V U/S Flange	1099	-	Flange	0	0	0	0	0	0
1100	09-06-2025	From 16-C-01 Bottom line 1st I/V Gland	1100	-	Gland	0	0	0	0	0	0
1101	09-06-2025	From 16-C-01 Bottom line 1st I/V D/S Flange	1101	-	Flange	0	0	0	0	0	0
1102	09-06-2025	NRV U/S Flange	1102	-	Flange	0	0	0	0	0	0
1103	09-06-2025	NRV Top Flange	1103	-	Flange	0	0	0	0	0	0
1104	09-06-2025	From 16-C-01 Bottom line 2nd I/V U/S Flange	1104	-	Flange	0	0	0	0	0	0
1105	09-06-2025	From 16-C-01 Bottom line 2nd I/V Gland	1105	-	Gland	0	0	0	0	0	0
1106	09-06-2025	From 16-C-01 Bottom line 2nd I/V D/S Flange	1106	-	Flange	0	0	0	0	0	0
1107	09-06-2025	NRV U/S Flange	1107	-	Flange	0	0	0	0	0	0
1108	09-06-2025	NRV Top Flange	1108	-	Flange	0	0	0	0	0	0
1109	09-06-2025	16-FV-1804 U/S line I/V U/S Flange	1109	-	Flange	0	0	0	0	0	0
1110	09-06-2025	16-FV-1804 U/S line I/V Gland	1110	-	Gland	0	0	0	0	0	0
1111	09-06-2025	16-FV-1804 U/S line I/V D/S Flange	1111	-	Flange	0	0	0	0	0	0
1112	09-06-2025	Drain Line 1st I/V Gland	1112	-	Gland	0	0	0	0	0	0
1113	09-06-2025	Stainer Flange	1113	-	Flange	0	0	0	0	0	0
1114	09-06-2025	Drain Line 2nd I/V Gland	1114	-	Gland	0	0	0	0	0	0
1115	09-06-2025	16-FV-1804 C/V U/S Flange	1115	-	Flange	0	0	0	0	0	0
1116	09-06-2025	16-FV-1804 C/V Gland	1116	-	Gland	0	0	0	0	0	0
1117	09-06-2025	16-FV-1804 C/V D/S Flange	1117	-	Flange	0	0	0	0	0	0
1118	09-06-2025	Drain Line I/V Gland	1118	-	Gland	0	0	0	0	0	0

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CDU-VDU											
1	12-06-2025	Intergas Inlet Line U/S I/V U/S Flange	1	-	Flange	0	0	0	0	0	0
2	12-06-2025	Intergas Inlet Line U/S I/V U/S Gland	2	-	Valve	0	0	0	0	0	0
3	12-06-2025	Intergas Inlet Line U/S I/V D/S Flange	3	-	Flange	0	0	0	0	0	0
4	12-06-2025	Intergas Inlet Line D/S I/V U/S Flange	4	-	Flange	0	0	0	0	0	0
5	12-06-2025	Intergas Inlet Line D/S I/V U/S Gland	5	-	Valve	0	0	0	0	0	0
6	12-06-2025	Intergas Inlet Line D/S I/V D/S Flange	6	-	Flange	0	0	0	0	0	0
7	12-06-2025	UNSTAB Naptha Outlet Line U/S I/V U/S	7	-	Valve	0	0	0	0	0	0
8	12-06-2025	UNSTAB Naptha Outlet Line U/S I/V U/S	8	-	Valve	0	0	0	0	0	0
9	12-06-2025	UNSTAB Naptha Outlet Line U/S I/V D/S	9	-	Valve	0	0	0	0	0	0
10	12-06-2025	UNSTAB Naptha Outlet Line D/S I/V U/S	10	-	Valve	0	0	0	0	0	0
11	12-06-2025	UNSTAB Naptha Outlet Line D/S I/V U/S	11	-	Valve	0	0	0	0	0	0
12	12-06-2025	UNSTAB Naptha Outlet Line D/S I/V D/S	12	-	Valve	0	0	0	0	0	0
13	12-06-2025	STAB Naptha to Storage Outlet Line I/V	13	-	Valve	0	0	0	0	0	0
14	12-06-2025	STAB Naptha to Storage Outlet Line I/V	14	-	Valve	0	0	0	0	0	0
15	12-06-2025	STAB Naptha to Storage Outlet Line I/V	15	-	Valve	0	0	0	0	0	0
16	12-06-2025	Meter line 1st I/V Gland	16	-	Valve	0	0	0	0	0	0
17	12-06-2025	Meter line 2nd I/V Gland	17	-	Valve	0	0	0	0	0	0
18	12-06-2025	Drain line 1st I/V Gland	18	-	Valve	0	0	0	0	0	0
19	12-06-2025	Drain line 2nd I/V Gland	19	-	Valve	0	0	0	0	0	0
20	12-06-2025	Vrain Line I/V Gland	20	-	Valve	0	0	0	0	0	0
21	12-06-2025	Vrain Line Safty Flange	21	-	Flange	0	0	0	0	0	0
22	12-06-2025	LPG Bullet Outlet U/S Line I/V U/S Flange	22	-	Flange	0	0	0	0	0	0
23	12-06-2025	LPG Bullet Outlet U/S Line I/V U/S Gland	23	-	Valve	0	0	0	0	0	0
24	12-06-2025	LPG Bullet Outlet U/S Line I/V D/S Flange	24	-	Flange	0	0	0	0	0	0
25	12-06-2025	LPG Bullet Outlet D/S Line I/V U/S Flange	25	-	Flange	0	0	0	0	0	0
26	12-06-2025	LPG Bullet Outlet D/S Line I/V U/S Gland	26	-	Valve	0	0	0	0	0	0
27	12-06-2025	LPG Bullet Outlet D/S Line I/V D/S Flange	27	-	Flange	0	0	0	0	0	0
28	12-06-2025	LPG to Inlet Vrain Line I/V Gland	28	-	Valve	0	0	0	0	0	0
29	12-06-2025	LPG to Inlet Vrain Line I/V Safty Flange	29	-	Flange	0	0	0	0	0	0
30	12-06-2025	LPG to Inlet U/S Line I/V U/S Flange	30	-	Flange	0	0	0	0	0	0
31	12-06-2025	LPG to Inlet U/S Line I/V U/S Gland	31	-	Valve	0	0	0	0	0	0
32	12-06-2025	LPG to Inlet U/S Line I/V D/S Flange	32	-	Flange	0	0	0	0	0	0
33	12-06-2025	LPG to Inlet D/S Line I/V U/S Flange	33	-	Flange	0	0	0	0	0	0
34	12-06-2025	LPG to Inlet D/S Line I/V U/S Gland	34	-	Valve	0	0	0	0	0	0
35	12-06-2025	LPG to Inlet D/S Line I/V D/S Flange	35	-	Flange	0	0	0	0	0	0
36	12-06-2025	LPG Ex SPHERE Inlet U/S Line I/V U/S Flange	36	-	Flange	0	0	0	0	0	0
37	12-06-2025	LPG Ex SPHERE Inlet U/S Line I/V U/S Gland	37	-	Valve	0	0	0	0	0	0
38	12-06-2025	LPG Ex SPHERE Inlet U/S Line I/V D/S Flange	38	-	Flange	0	0	0	0	0	0
39	12-06-2025	LPG Ex SPHERE Inlet D/S Line I/V U/S Flange	39	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	12-06-2025	LPG Ex SPHERE Inlet D/S Line I/V U/S Gland	40	-	Valve	0	0	0	0	0	0
41	12-06-2025	LPG Ex SPHERE Inlet D/S Line I/V D/S Flange	41	-	Flange	0	0	0	0	0	0
42	12-06-2025	Fuel Gas Inlet U/S Line I/V U/S Flange	42	-	Flange	0	0	0	0	0	0
43	12-06-2025	Fuel Gas Inlet U/S Line I/V U/S Gland	43	-	Valve	0	0	0	0	0	0
44	12-06-2025	Fuel Gas Inlet U/S Line I/V D/S Flange	44	-	Flange	0	0	0	0	0	0
45	12-06-2025	Fuel Gas Inlet D/S Line I/V U/S Flange	45	-	Flange	0	0	0	0	0	0
46	12-06-2025	Fuel Gas Inlet 0/5 Line I/V U/S Gland	46	-	Valve	0	0	0	0	0	0
47	12-06-2025	Fuel Gas Inlet D/S Line I/V D/S Flange	47	-	Flange	0	0	0	0	0	0
48	12-06-2025	Vrain Line I/V Gland	48	-	Valve	0	0	0	0	0	0
49	12-06-2025	Vrain Line Safety Flange	49	-	Flange	0	0	0	0	0	0
50	12-06-2025	LPG to SPHERE Inlet U/S Line I/V U/S Flange	50	-	Flange	0	0	0	0	0	0
51	12-06-2025	LPG to SPHERE Inlet U/S Line I/V U/S Gland	51	-	Valve	0	0	0	0	0	0
52	12-06-2025	LPG to SPHERE Inlet U/S Line I/V D/S Flange	52	-	Flange	0	0	0	0	0	0
53	12-06-2025	LPG to SPHERE Inlet D/S Line I/V U/S Flange	53	-	Flange	0	0	0	0	0	0
54	12-06-2025	LPG to SPHERE Inlet D/S Line I/V U/S Gland	54	-	Valve	0	0	0	0	0	0
55	12-06-2025	LPG to SPHERE Inlet D/S Line I/V D/S Flange	55	-	Flange	0	0	0	0	0	0
56	12-06-2025	Meter Line Flange	56	-	Flange	0	0	0	0	0	0
57	12-06-2025	01-FV-1905 U/S Line I/V U/S Flange	57	-	Flange	0	0	0	0	0	0
58	12-06-2025	01-FV-1905 U/S Line I/V U/S Gland	58	-	Valve	0	0	0	0	0	0
59	12-06-2025	01-FV-1905 U/S Line I/V D/S Flange	59	-	Flange	0	0	0	0	0	0
60	12-06-2025	Drain Line I/V Gland	60	-	Valve	0	0	0	0	0	0
61	12-06-2025	Drain Line I/V Safety Flange	61	-	Flange	0	0	0	0	0	0
62	12-06-2025	01-FV-1905 C/V Line I/V U/S Flange	62	-	Flange	0	0	0	0	0	0
63	12-06-2025	02-FV-1905 C/V Line I/V U/S Gland	63	-	Valve	0	0	0	0	0	0
64	12-06-2025	01-FV-1905 C/V Line I/V D/S Flange	64	-	Flange	0	0	0	0	0	0
65	12-06-2025	01-FV-1905 D/S Line I/V U/S Flange	65	-	Flange	0	0	0	0	0	0
66	12-06-2025	01-FV-1905 D/S Line I/V U/S Gland	66	-	Valve	0	0	0	0	0	0
67	12-06-2025	01-FV-1905 D/S Line I/V D/S Flange	67	-	Flange	0	0	0	0	0	0
68	12-06-2025	Bypass Line I/V U/S Flange	68	-	Flange	0	0	0	0	0	0
69	12-06-2025	Bypass Line I/V U/S Gland	69	-	Valve	0	0	0	0	0	0
70	12-06-2025	Bypass Line I/V D/S Flange	70	-	Flange	0	0	0	0	0	0
71	12-06-2025	01-FV-1921 U/S Line I/V U/S Flange	71	-	Flange	0	0	0	0	0	0
72	12-06-2025	01-FV-1921 U/S Line I/V U/S Gland	72	-	Valve	0	0	0	0	0	0
73	12-06-2025	01-FV-1921 U/S Line I/V D/S Flange	73	-	Flange	0	0	0	0	0	0
74	12-06-2025	Drain Line I/V Gland	74	-	Valve	0	0	0	0	0	0
75	12-06-2025	Drain Line Safety Flange	75	-	Flange	0	0	0	0	0	0
76	12-06-2025	01-FV-1921 C/V U/S Flange	76	-	Flange	0	0	0	0	0	0
77	12-06-2025	01-FV-1921 C/V U/S Gland	77	-	Valve	0	0	0	0	0	0
78	12-06-2025	01-FV-1921 C/V D/S Flange	78	-	Flange	0	0	0	0	0	0
79	12-06-2025	01-FV-1921 D/S Line I/V U/S Flange	79	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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80	12-06-2025	01-FV-1921 D/S Line I/V U/S Flange	80	-	Flange	0	0	0	0	0	0
81	12-06-2025	01-FV-1921 D/S Line I/V D/S Flange	81	-	Flange	0	0	0	0	0	0
82	12-06-2025	Drain Line I/V Gland	82	-	Valve	0	0	0	0	0	0
83	12-06-2025	Drain Line Safety Flange	83	-	Flange	0	0	0	0	0	0
84	12-06-2025	Bypass Line I/V U/S Flange	84	-	Flange	0	0	0	0	0	0
85	12-06-2025	Bypass Line I/V U/S Gland	85	-	Valve	0	0	0	0	0	0
86	12-06-2025	Bypass Line I/V D/S Flange	86	-	Flange	0	0	0	0	0	0
87	12-06-2025	01-LV-1701 U/S Line I/V U/S Flange	87	-	Flange	0	0	0	0	0	0
88	12-06-2025	01-LV-1701 U/S Line I/V U/S Gland	88	-	Valve	0	0	0	0	0	0
89	12-06-2025	01-LV-1701 U/S Line I/V D/S Flange	89	-	Flange	0	0	0	0	0	0
90	12-06-2025	Drain Line I/V Gland	90	-	Valve	0	0	0	0	0	0
91	12-06-2025	Drain Line Safety Flange	91	-	Flange	0	0	0	0	0	0
92	12-06-2025	01-LV-1701 C/S Line I/V U/S Flange	92	-	Flange	0	0	0	0	0	0
93	12-06-2025	01-LV-1701 C/S Line I/V U/S Gland	93	-	Valve	0	0	0	0	0	0
94	12-06-2025	01-LV-1701 C/S Line I/V D/S Flange	94	-	Flange	0	0	0	0	0	0
95	12-06-2025	01-LV-1701 D/S Line I/V U/S Flange	95	-	Flange	0	0	0	0	0	0
96	12-06-2025	01-LV-1701 D/S Line I/V U/S Gland	96	-	Valve	0	0	0	0	0	0
97	12-06-2025	01-LV-1701 D/S Line I/V D/S Flange	97	-	Flange	0	0	0	0	0	0
98	12-06-2025	Drain Line I/V Gland	98	-	Valve	0	0	0	0	0	0
99	12-06-2025	Drain Line Safety Flange	99	-	Flange	0	0	0	0	0	0
100	12-06-2025	Bypass Line I/V U/S Flange	100	-	Flange	0	0	0	0	0	0
101	12-06-2025	Bypass Line I/V U/S Gland	101	-	Valve	0	0	0	0	0	0
102	12-06-2025	Bypass Line I/V D/S Flange	102	-	Flange	0	0	0	0	0	0
103	12-06-2025	01-FV-1901 U/S Line I/V U/S Flange	103	-	Flange	0	0	0	0	0	0
104	12-06-2025	01-FV-1901 U/S Line I/V U/S Gland	104	-	Valve	0	0	0	0	0	0
105	12-06-2025	01-FV-1901 U/S Line I/V D/S Flange	105	-	Flange	0	0	0	0	0	0
106	12-06-2025	Drain Line I/V Gland	106	-	Valve	0	0	0	0	0	0
107	12-06-2025	Drain Line Safety Flange	107	-	Flange	0	0	0	0	0	0
108	12-06-2025	01-FV-1901 C/V U/S Flange	108	-	Flange	0	0	0	0	0	0
109	12-06-2025	01-FV-1901 C/V U/S Gland	109	-	Valve	0	0	0	0	0	0
110	12-06-2025	01-FV-1901 C/V D/S Flange	110	-	Flange	0	0	0	0	0	0
111	12-06-2025	01-FV-1901 D/S Line I/V U/S Flange	111	-	Flange	0	0	0	0	0	0
112	12-06-2025	01-FV-1901 D/S Line I/V U/S Gland	112	-	Valve	0	0	0	0	0	0
113	12-06-2025	01-FV-1901 D/S Line I/V D/S Flange	113	-	Flange	0	0	0	0	0	0
114	12-06-2025	Drain Line I/V Gland	114	-	Valve	0	0	0	0	0	0
115	12-06-2025	Drain Line Safety Flange	115	-	Flange	0	0	0	0	0	0
116	12-06-2025	Bypass Line I/V U/S Flange	116	-	Flange	0	0	0	0	0	0
117	12-06-2025	Bypass Line I/V U/S Gland	117	-	Valve	0	0	0	0	0	0
118	12-06-2025	Pump Seal	118	-	Valve	0	0	0	0	0	0
119	12-06-2025	01-FV-1904 U/S Line I/V U/S Flange	119	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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120	12-06-2025	01-FV-1904 U/S Line I/V U/S Gland	120	-	Valve	0	0	0	0	0	0
121	12-06-2025	01-FV-1904 U/S Line I/V D/S Flange	121	-	Flange	0	0	0	0	0	0
122	12-06-2025	Drain Line I/V Gland	122	-	Valve	0	0	0	0	0	0
123	12-06-2025	Drain Line Safety Flange	123	-	Flange	0	0	0	0	0	0
124	12-06-2025	01-FV-1904 C/V U/S Flange	124	-	Flange	0	0	0	0	0	0
125	12-06-2025	01-FV-1904 C/V U/S Gland	125	-	Valve	0	0	0	0	0	0
126	12-06-2025	01-FV-1904 C/V D/S Flange	126	-	Flange	0	0	0	0	0	0
127	12-06-2025	01-FV-1904 D/S Line I/V U/S Flange	127	-	Flange	0	0	0	0	0	0
128	12-06-2025	01-FV-1904 D/S Line I/V U/S Gland	128	-	Valve	0	0	0	0	0	0
129	12-06-2025	01-FV-1904 D/S Line I/V D/S Flange	129	-	Flange	0	0	0	0	0	0
130	12-06-2025	Bypass Line I/V U/S Flange	130	-	Flange	0	0	0	0	0	0
131	12-06-2025	Bypass Line I/V U/S Gland	131	-	Valve	0	0	0	0	0	0
132	12-06-2025	Bypass Line I/V D/S Flange	132	-	Flange	0	0	0	0	0	0
133	12-06-2025	01-FV-1903 U/S Line I/V U/S Flange	133	-	Flange	0	0	0	0	0	0
134	12-06-2025	01-FV-1903 U/S Line I/V Gland	134	-	Valve	0	0	0	0	0	0
135	12-06-2025	01-FV-1903 U/S Line I/V D/S Flange	135	-	Flange	0	0	0	0	0	0
136	12-06-2025	Drain Line I/V Gland	136	-	Valve	0	0	0	0	0	0
137	12-06-2025	Drain Line Safety Flange	137	-	Flange	0	0	0	0	0	0
138	12-06-2025	01-FV-1903 C/V U/S Flange	138	-	Flange	0	0	0	0	0	0
139	12-06-2025	01-FV-1903 C/V U/S Gland	139	-	Valve	0	0	0	0	0	0
140	12-06-2025	01-FV-1903 C/V D/S Flange	140	-	Flange	0	0	0	0	0	0
141	12-06-2025	01-FV-1903 D/S Line I/V U/S Flange	141	-	Flange	0	0	0	0	0	0
142	12-06-2025	01-FV-1903 D/S Line I/V U/S Gland	142	-	Valve	0	0	0	0	0	0
143	12-06-2025	01-FV-1903 D/S Line I/V D/S Flange	143	-	Flange	0	0	0	0	0	0
144	12-06-2025	Drain Line I/V Gland	144	-	Valve	0	0	0	0	0	0
145	12-06-2025	Drain Line Safety Flange	145	-	Flange	0	0	0	0	0	0
146	12-06-2025	Bypass Line I/V U/S Flange	146	-	Flange	0	0	0	0	0	0
147	12-06-2025	Bypass Line I/V U/S Gland	147	-	Valve	0	0	0	0	0	0
148	12-06-2025	Bypass Line I/V D/S Flange	148	-	Flange	0	0	0	0	0	0
149	12-06-2025	01-PA-106A Suction Line I/V Gland	149	-	Valve	0	0	0	0	0	0
150	12-06-2025	Stainer Top Flange	150	-	Flange	0	0	0	0	0	0
151	12-06-2025	Stainer Top Flange Drain Line I/V Gland	151	-	Valve	0	0	0	0	0	0
152	12-06-2025	Stainer Top Flange Drain Line Safety Flange	152	-	Flange	0	0	0	0	0	0
153	12-06-2025	Suction Line Flange	153	-	Flange	0	0	0	0	0	0
154	12-06-2025	Pump Seal	154	-	Valve	0	0	0	0	0	0
155	12-06-2025	Discharge Line Flange	155	-	Flange	0	0	0	0	0	0
156	12-06-2025	Meter line 1st I/V Gland	156	-	Valve	0	0	0	0	0	0
157	12-06-2025	Meter line 2nd I/V Gland	157	-	Valve	0	0	0	0	0	0
158	12-06-2025	Meter line Sampling I/V Gland	158	-	Valve	0	0	0	0	0	0
159	12-06-2025	Discharge Line Gland	159	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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160	12-06-2025	01-PA-106B Suction Line I/V Gland	160	-	Valve	0	0	0	0	0	0
161	12-06-2025	Stainer Top Flange	161	-	Flange	0	0	0	0	0	0
162	12-06-2025	Stainer Top Flange Drain Line I/V Gland	162	-	Valve	0	0	0	0	0	0
163	12-06-2025	Stainer Top Flange Drain Line Safety Flange	163	-	Flange	0	0	0	0	0	0
164	12-06-2025	Suction Line Flange	164	-	Flange	0	0	0	0	0	0
165	12-06-2025	Pump Seal	165	-	Valve	0	0	0	0	0	0
166	12-06-2025	Discharge Line Flange	166	-	Flange	0	0	0	0	0	0
167	12-06-2025	Meter line 1st I/V Gland	167	-	Valve	0	0	0	0	0	0
168	12-06-2025	Meter line 2nd I/V Gland	168	-	Valve	0	0	0	0	0	0
169	12-06-2025	Meter line Sampling I/V Gland	169	-	Valve	0	0	0	0	0	0
170	12-06-2025	Discharge Line Gland	170	-	Valve	0	0	0	0	0	0
171	12-06-2025	01-PA-105 A Suction Line I/V U/S Flange	171	-	Flange	0	0	0	0	0	0
172	12-06-2025	01-PA-105A Suction Line I/V U/S Gland	172	-	Valve	0	0	0	0	0	0
173	12-06-2025	01-PA-105A Suction Line I/V D/S Flange	173	-	Flange	0	0	0	0	0	0
174	12-06-2025	Stainer Top Flange	174	-	Flange	0	0	0	0	0	0
175	12-06-2025	Stainer Top Flange Drain Line I/V Gland	175	-	Valve	0	0	0	0	0	0
176	12-06-2025	Stainer Top Flange Drain Line Safety Flange	176	-	Flange	0	0	0	0	0	0
177	12-06-2025	Suction Line Flange	177	-	Flange	0	0	0	0	0	0
178	12-06-2025	Pump Seal	178	-	Valve	0	0	0	0	0	0
179	12-06-2025	Discharge Line Flange	179	-	Flange	0	0	0	0	0	0
180	12-06-2025	Meter line 1st I/V Gland	180	-	Valve	0	0	0	0	0	0
181	12-06-2025	Meter line 2nd I/V Gland	181	-	Valve	0	0	0	0	0	0
182	12-06-2025	Meter line Sampling I/V Gland	182	-	Valve	0	0	0	0	0	0
183	12-06-2025	NRV U/S Flange	183	-	Flange	0	0	0	0	0	0
184	12-06-2025	NRV Top Flange	184	-	Flange	0	0	0	0	0	0
185	12-06-2025	NRV D/S Flange	185	-	Flange	0	0	0	0	0	0
186	12-06-2025	Discharge Line I/V U/S Flange	186	-	Flange	0	0	0	0	0	0
187	12-06-2025	Discharge Line I/V U/S Gland	187	-	Valve	0	0	0	0	0	0
188	12-06-2025	Discharge Line I/V D/S Flange	188	-	Flange	0	0	0	0	0	0
189	12-06-2025	01 PA-105B Suction Line I/V U/S Flange	189	-	Flange	0	0	0	0	0	0
190	12-06-2025	01-PA-105B Suction Line I/V U/S Gland	190	-	Valve	0	0	0	0	0	0
191	12-06-2025	01-PA-105B Suction Line I/V D/S Flange	191	-	Flange	0	0	0	0	0	0
192	12-06-2025	Stainer Top Flange	192	-	Flange	0	0	0	0	0	0
193	12-06-2025	Stainer Top Flange Drain Line I/V Gland	193	-	Flange	0	0	0	0	0	0
194	12-06-2025	Stainer Top Flange Drain Line Safety Flange	194	-	Flange	0	0	0	0	0	0
195	12-06-2025	Suction Line Flange	195	-	Flange	0	0	0	0	0	0
196	12-06-2025	Pump Seal	196	-	Valve	0	0	0	0	0	0
197	12-06-2025	Discharge Line Flange	197	-	Flange	0	0	0	0	0	0
198	12-06-2025	Meter line 1st I/V Gland	198	-	Valve	0	0	0	0	0	0
199	12-06-2025	Meter line 2nd I/V Gland	199	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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200	12-06-2025	Meter line Sampling I/V Gland	200	-	Valve	0	0	0	0	0	0
201	12-06-2025	NRV I/V U/S Flange	201	-	Flange	0	0	0	0	0	0
202	12-06-2025	NRV Top Flange	202	-	Flange	0	0	0	0	0	0
203	12-06-2025	NRV I/V D/S Flange	203	-	Flange	0	0	0	0	0	0
204	12-06-2025	Discharge Line I/V U/S Flange	204	-	Flange	0	0	0	0	0	0
205	12-06-2025	Discharge Line I/V U/S Gland	205	-	Valve	0	0	0	0	0	0
206	12-06-2025	Discharge Line I/V D/S Flange	206	-	Flange	0	0	0	0	0	0
207	12-06-2025	01-PA-103B Suction Line I/V U/S Flange	207	-	Flange	0	0	0	0	0	0
208	12-06-2025	01-PA-103B Suction Line I/V Gland	208	-	Valve	0	0	0	0	0	0
209	12-06-2025	01-PA-103B Suction Line I/V D/S Flange	209	-	Flange	0	0	0	0	0	0
210	12-06-2025	Stainer Top Flange	210	-	Flange	0	0	0	0	0	0
211	12-06-2025	Stainer Top Flange Drain Line I/V Gland	211	-	Valve	0	0	0	0	0	0
212	12-06-2025	Stainer Top Flange Drain Line Safety Flange	212	-	Flange	0	0	0	0	0	0
213	12-06-2025	Suction Line Flange	213	-	Flange	0	0	0	0	0	0
214	12-06-2025	PumpSeal	214	-	Valve	0	0	0	0	0	0
215	12-06-2025	Discharge Line Flange	215	-	Flange	0	0	0	0	0	0
216	12-06-2025	Meter line 1st I/V Gland	216	-	Valve	0	0	0	0	0	0
217	12-06-2025	Meter line 2nd I/V Gland	217	-	Valve	0	0	0	0	0	0
218	12-06-2025	Meter line Sampling I/V Gland	218	-	Valve	0	0	0	0	0	0
219	12-06-2025	NRV I/V U/S Flange	219	-	Flange	0	0	0	0	0	0
220	12-06-2025	NRV Top Flange	220	-	Flange	0	0	0	0	0	0
221	12-06-2025	NRV I/V D/S Flange	221	-	Flange	0	0	0	0	0	0
222	12-06-2025	Discharge Line I/V U/S Flange	222	-	Flange	0	0	0	0	0	0
223	12-06-2025	Discharge Line I/V Gland	223	-	Valve	0	0	0	0	0	0
224	12-06-2025	Discharge Line I/V D/S Flange	224	-	Flange	0	0	0	0	0	0
225	12-06-2025	Suction Line to Outside Line 1st I/V U/S	225	-	Valve	0	0	0	0	0	0
226	12-06-2025	Suction Line to Outside Line 1st I/V Gland	226	-	Valve	0	0	0	0	0	0
227	12-06-2025	Suction Line to Outside Line 1st I/V D/S	227	-	Valve	0	0	0	0	0	0
228	12-06-2025	Suction Line to Outside Line 2nd I/V U/S	228	-	Valve	0	0	0	0	0	0
229	12-06-2025	Suction Line to Outside Line 2nd I/V Gland	229	-	Valve	0	0	0	0	0	0
230	12-06-2025	Suction Line to Outside Line 2nd I/V D/S	230	-	Valve	0	0	0	0	0	0
231	12-06-2025	Suction Line to Outside Line 3rd I/V U/S	231	-	Valve	0	0	0	0	0	0
232	12-06-2025	Suction Line to Outside Line 3rd I/V Gland	232	-	Valve	0	0	0	0	0	0
233	12-06-2025	Suction Line to Outside Line 3rd I/V D/S	233	-	Valve	0	0	0	0	0	0
234	12-06-2025	Stainer Flange	234	-	Flange	0	0	0	0	0	0
235	12-06-2025	OWS Point	235	-	Valve	0	0	0	0	0	0
236	12-06-2025	01-PA-103A Suction Line I/V U/S Flange	236	-	Flange	0	0	0	0	0	0
237	12-06-2025	01-PA-103A Suction Line I/V Gland	237	-	Valve	0	0	0	0	0	0
238	12-06-2025	01-PA-103A Suction Line I/V D/S Flange	238	-	Flange	0	0	0	0	0	0
239	12-06-2025	Stainer Top Flange	239	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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240	12-06-2025	Stainer Top Flange Drain Line Gland	240	-	Valve	0	0	0	0	0	0
241	12-06-2025	Stainer Top Flange Drain Line Safety Flange	241	-	Flange	0	0	0	0	0	0
242	12-06-2025	Suction Line Flange	242	-	Flange	0	0	0	0	0	0
243	12-06-2025	Pump Seal	243	-	Valve	0	0	0	0	0	0
244	12-06-2025	Discharge Line Flange	244	-	Flange	0	0	0	0	0	0
245	12-06-2025	Meter line 1st I/V Gland	245	-	Valve	0	0	0	0	0	0
246	12-06-2025	Meter line 2nd I/V Gland	246	-	Valve	0	0	0	0	0	0
247	12-06-2025	Meter line Sampling Point I/V Gland	247	-	Valve	0	0	0	0	0	0
248	12-06-2025	NRV I/V U/S Flange	248	-	Flange	0	0	0	0	0	0
249	12-06-2025	NRV Top Flange	249	-	Flange	0	0	0	0	0	0
250	12-06-2025	NRV I/V D/S Flange	250	-	Flange	0	0	0	0	0	0
251	12-06-2025	Discharge Line I/V U/S Flange	251	-	Flange	0	0	0	0	0	0
252	12-06-2025	Discharge Line I/V Gland	252	-	Valve	0	0	0	0	0	0
253	12-06-2025	Discharge Line I/V D/S Flange	253	-	Flange	0	0	0	0	0	0
254	12-06-2025	Pump to Drain Line 1st I/V Gland	254	-	Valve	0	0	0	0	0	0
255	12-06-2025	Pump to Drain Line 2nd I/V Gland	255	-	Valve	0	0	0	0	0	0
256	12-06-2025	Pump to Drain Line 3rd I/V Gland	256	-	Valve	0	0	0	0	0	0
257	12-06-2025	Stainer Flange	257	-	Flange	0	0	0	0	0	0
258	12-06-2025	OWS Point	258	-	Valve	0	0	0	0	0	0
259	12-06-2025	01-FV-4003 U/S Line I/V U/S Flange	259	-	Flange	0	0	0	0	0	0
260	12-06-2025	01-FV-4003 U/S Line I/V Gland	260	-	Valve	0	0	0	0	0	0
261	12-06-2025	01-FV-4003 U/S Line I/V D/S Flange	261	-	Flange	0	0	0	0	0	0
262	12-06-2025	Drain Line I/V Gland	262	-	Valve	0	0	0	0	0	0
263	12-06-2025	Drain Line Safety Flange	263	-	Flange	0	0	0	0	0	0
264	12-06-2025	01-FV-4003 C/V U/S Flange	264	-	Flange	0	0	0	0	0	0
265	12-06-2025	01-FV-4003C/V Gland	265	-	Valve	0	0	0	0	0	0
266	12-06-2025	01-FV-4003 C/V D/S Flange	266	-	Flange	0	0	0	0	0	0
267	12-06-2025	Drain Line I/V Gland	267	-	Valve	0	0	0	0	0	0
268	12-06-2025	Drain Line Safety Flange	268	-	Flange	0	0	0	0	0	0
269	12-06-2025	01-FV-4003 D/S Line I/V U/S Flange	269	-	Flange	0	0	0	0	0	0
270	12-06-2025	01-FV-4003 D/S Line I/V Gland	270	-	Valve	0	0	0	0	0	0
271	12-06-2025	01-FV-4003 D/S Line I/V D/S Flange	271	-	Flange	0	0	0	0	0	0
272	12-06-2025	Bypass Line I/V U/S Flange	272	-	Flange	0	0	0	0	0	0
273	12-06-2025	Bypass Line I/V Gland	273	-	Valve	0	0	0	0	0	0
274	12-06-2025	Bypass Line I/V D/S Flange	274	-	Flange	0	0	0	0	0	0
275	12-06-2025	01-FV-3803 U/S Line I/V U/S Flange	275	-	Flange	0	0	0	0	0	0
276	12-06-2025	01-FV-3803 U/S Line I/V Gland	276	-	Valve	0	0	0	0	0	0
277	12-06-2025	01-FV-3803 U/S Line I/V D/S Flange	277	-	Flange	0	0	0	0	0	0
278	12-06-2025	Drain Line I/V Gland	278	-	Valve	0	0	0	0	0	0
279	12-06-2025	Drain Line Safety Flange	279	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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280	12-06-2025	01-FV-3803 C/I/V U/S Flange	280	-	Flange	0	0	0	0	0	0
281	12-06-2025	01-FV-3803 C/V Gland	281	-	Valve	0	0	0	0	0	0
282	12-06-2025	01-FV-3803 C/V D/S Flange	282	-	Flange	0	0	0	0	0	0
283	12-06-2025	Drain Line I/V Gland	283	-	Valve	0	0	0	0	0	0
284	12-06-2025	Drain Line Safety Flange	284	-	Flange	0	0	0	0	0	0
285	12-06-2025	01-FV-3803 D/S Line I/V U/S Flange	285	-	Flange	0	0	0	0	0	0
286	12-06-2025	01-FV-3803 D/S Line I/V Gland	286	-	Valve	0	0	0	0	0	0
287	12-06-2025	01-FV-3803 D/S Line I/V D/S Flange	287	-	Flange	0	0	0	0	0	0
288	12-06-2025	Bypass Line I/V U/S Flange	288	-	Flange	0	0	0	0	0	0
289	12-06-2025	Bypass Line I/V Gland	289	-	Valve	0	0	0	0	0	0
290	12-06-2025	Bypass Line I/V D/S Flange	290	-	Flange	0	0	0	0	0	0
291	12-06-2025	01-FV-3901 U/S Line I/V U/S Flange	291	-	Flange	0	0	0	0	0	0
292	12-06-2025	01-FV-3901 U/S Line I/V Gland	292	-	Valve	0	0	0	0	0	0
293	12-06-2025	01-FV-3901 U/S Line I/V D/S Flange	293	-	Flange	0	0	0	0	0	0
294	12-06-2025	Drain Line I/V Gland	294	-	Valve	0	0	0	0	0	0
295	12-06-2025	Drain Line Safety Flange	295	-	Flange	0	0	0	0	0	0
296	12-06-2025	01-FV-3901 C/V U/S Flange	296	-	Flange	0	0	0	0	0	0
297	12-06-2025	01-FV-3901 C/V Gland	297	-	Valve	0	0	0	0	0	0
298	12-06-2025	01-FV-3901 C/V D/S Flange	298	-	Flange	0	0	0	0	0	0
299	12-06-2025	Drain Line I/V Gland	299	-	Valve	0	0	0	0	0	0
300	12-06-2025	Drain Line Safety Flange	300	-	Flange	0	0	0	0	0	0
301	12-06-2025	01-FV-3901 D/S Line I/V U/S Flange	301	-	Flange	0	0	0	0	0	0
302	12-06-2025	01-FV-3901 D/S Line I/V Gland	302	-	Valve	0	0	0	0	0	0
303	12-06-2025	01-FV-3901 D/S Line I/V D/S Flange	303	-	Flange	0	0	0	0	0	0
304	12-06-2025	Bypass Line I/V U/S Flange	304	-	Flange	0	0	0	0	0	0
305	12-06-2025	Bypass Line I/V Gland	305	-	Valve	0	0	0	0	0	0
306	12-06-2025	Bypass Line I/V D/S Flange	306	-	Flange	0	0	0	0	0	0
307	12-06-2025	3.P.01.3916.A1A To EE-108Line I/V U/S	307	-	Valve	0	0	0	0	0	0
308	12-06-2025	3.P.01.3916.A1A To EE-108Line I/V Gland	308	-	Valve	0	0	0	0	0	0
309	12-06-2025	3.P.01.3916.A1A To EE-108Line I/V D/S	309	-	Valve	0	0	0	0	0	0
310	12-06-2025	3.P.01.3916.A1A To Naptha Pool Line I/V	310	-	Valve	0	0	0	0	0	0
311	12-06-2025	3.P.01.3916.A1A To Naptha Pool Line I/V	311	-	Valve	0	0	0	0	0	0
312	12-06-2025	3.P.01.3916.A1A To Naptha Pool Line I/V	312	-	Valve	0	0	0	0	0	0
313	12-06-2025	01-PR-101B Suction Line I/V U/S Flange	313	-	Flange	0	0	0	0	0	0
314	12-06-2025	01-PR-101B Suction Line I/V Gland	314	-	Valve	0	0	0	0	0	0
315	12-06-2025	01-PR-101B Suction Line I/V D/S Flange	315	-	Flange	0	0	0	0	0	0
316	12-06-2025	Stainer Top Flange	316	-	Flange	0	0	0	0	0	0
317	12-06-2025	Stainer Top Flange Drain Line I/V Gland	317	-	Valve	0	0	0	0	0	0
318	12-06-2025	Stainer Top Flange Drain Line I/V Safety	318	-	Valve	0	0	0	0	0	0
319	12-06-2025	Suction Line Flange	319	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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320	12-06-2025	Pump Seal	320	-	Valve	0	0	0	0	0	0
321	12-06-2025	Discharge Line Flange	321	-	Flange	0	0	0	0	0	0
322	12-06-2025	Meter Line 1st I/V Gland	322	-	Valve	0	0	0	0	0	0
323	12-06-2025	Meter line 2nd I/V Gland	323	-	Valve	0	0	0	0	0	0
324	12-06-2025	Meter line Sampling Point I/V Gland	324	-	Valve	0	0	0	0	0	0
325	12-06-2025	NRV I/V U/S Flange	325	-	Flange	0	0	0	0	0	0
326	12-06-2025	NRV Top Flange	326	-	Flange	0	0	0	0	0	0
327	12-06-2025	NRV I/V D/S Flange	327	-	Flange	0	0	0	0	0	0
328	12-06-2025	Discharge Line I/V U/S Flange	328	-	Flange	0	0	0	0	0	0
329	12-06-2025	Discharge Line I/V Gland	329	-	Valve	0	0	0	0	0	0
330	12-06-2025	Discharge Line I/V D/S Flange	330	-	Flange	0	0	0	0	0	0
331	12-06-2025	Pump to Drain Line 1st I/V Gland	331	-	Valve	0	0	0	0	0	0
332	12-06-2025	Pump to Drain Line 2nd I/V Gland	332	-	Valve	0	0	0	0	0	0
333	12-06-2025	Pump to Drain Line 3rd I/V Gland	333	-	Valve	0	0	0	0	0	0
334	12-06-2025	Stainer Flange	334	-	Flange	0	0	0	0	0	0
335	12-06-2025	OWS Point	335	-	Valve	0	0	0	0	0	0
336	12-06-2025	01-PA-101A Suction Line I/V U/S Flange	336	-	Flange	0	0	0	0	0	0
337	12-06-2025	01-PA-101A Suction Line I/V Gland	337	-	Valve	0	0	0	0	0	0
338	12-06-2025	01-PA-101A Suction Line I/V D/S Flange	338	-	Flange	0	0	0	0	0	0
339	12-06-2025	Stainer Top Flange	339	-	Flange	0	0	0	0	0	0
340	12-06-2025	Stainer Top Flange I/V Gland	340	-	Valve	0	0	0	0	0	0
341	12-06-2025	Stainer Top Flange Safety Flange	341	-	Flange	0	0	0	0	0	0
342	12-06-2025	Suction Line Flange	342	-	Flange	0	0	0	0	0	0
343	12-06-2025	Pump Seal	343	-	Valve	0	0	0	0	0	0
344	12-06-2025	Discharge Line Flange	344	-	Flange	0	0	0	0	0	0
345	12-06-2025	Meter Line 1st I/V Gland	345	-	Valve	0	0	0	0	0	0
346	12-06-2025	Meter line 2nd I/V Gland	346	-	Valve	0	0	0	0	0	0
347	12-06-2025	Meter line Sampling Point I/V Gland	347	-	Valve	0	0	0	0	0	0
348	12-06-2025	Discharge Line I/V U/S Flange	348	-	Flange	0	0	0	0	0	0
349	12-06-2025	Discharge Line I/V Gland	349	-	Valve	0	0	0	0	0	0
350	12-06-2025	Discharge Line I/V D/S Flange	350	-	Flange	0	0	0	0	0	0
351	12-06-2025	Suction Line To Outside Line 1st I/V U/S	351	-	Valve	0	0	0	0	0	0
352	12-06-2025	Suction Line To Outside Line 1st I/V Gland	352	-	Valve	0	0	0	0	0	0
353	12-06-2025	Suction Line To Outside Line 1st I/V D/S	353	-	Valve	0	0	0	0	0	0
354	12-06-2025	Suction Line To Outside Line 2nd I/V U/S	354	-	Valve	0	0	0	0	0	0
355	12-06-2025	Suction Line To Outside Line 2nd I/V Gland	355	-	Valve	0	0	0	0	0	0
356	12-06-2025	Suction Line To Outside Line 2nd I/V D/S	356	-	Valve	0	0	0	0	0	0
357	12-06-2025	Suction Line To Outside Line 3rd I/V U/S	357	-	Valve	0	0	0	0	0	0
358	12-06-2025	Suction Line To Outside Line 3rd I/V Gland	358	-	Valve	0	0	0	0	0	0
359	12-06-2025	Suction Line To Outside Line 3rd I/V D/S	359	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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360	12-06-2025	Pump to Drain Line 1st I/V Gland	360	-	Valve	0	0	0	0	0	0
361	12-06-2025	Pump to Drain Line 2nd I/V Gland	361	-	Valve	0	0	0	0	0	0
362	12-06-2025	Pump to Drain Line 3rd I/V Gland	362	-	Valve	0	0	0	0	0	0
363	12-06-2025	Stainer Flange	363	-	Flange	0	0	0	0	0	0
364	12-06-2025	OWS Point	364	-	Valve	0	0	0	0	0	0
365	12-06-2025	01-FV-3701 U/S Line I/V U/S Flange	365	-	Flange	0	0	0	0	0	0
366	12-06-2025	01-FV-3701 U/S Line I/V Gland	366	-	Valve	0	0	0	0	0	0
367	12-06-2025	01-FV-3701 U/S Line I/V D/S Flange	367	-	Flange	0	0	0	0	0	0
368	12-06-2025	Drain Line I/V Gland	368	-	Valve	0	0	0	0	0	0
369	12-06-2025	Drain Line Safety Flange	369	-	Flange	0	0	0	0	0	0
370	12-06-2025	01-FV-3701 C/V U/S Flange	370	-	Flange	0	0	0	0	0	0
371	12-06-2025	01-FV-3701 C/V Gland	371	-	Valve	0	0	0	0	0	0
372	12-06-2025	01-FV-3701 C/V D/S Flange	372	-	Flange	0	0	0	0	0	0
373	12-06-2025	Drain Line I/V Gland	373	-	Valve	0	0	0	0	0	0
374	12-06-2025	Drain Line Safety Flange	374	-	Flange	0	0	0	0	0	0
375	12-06-2025	01-FV-3701 D/S Line I/V U/S Flange	375	-	Flange	0	0	0	0	0	0
376	12-06-2025	01-FV-3701 D/S Line I/V Gland	376	-	Valve	0	0	0	0	0	0
377	12-06-2025	01-FV-3701 D/S Line I/V D/S Flange	377	-	Flange	0	0	0	0	0	0
378	12-06-2025	Bypass Line I/V Gland	378	-	Valve	0	0	0	0	0	0
379	12-06-2025	To Naptha Pool EX-PA-101 Line I/V U/S	379	-	Valve	0	0	0	0	0	0
380	12-06-2025	To Naptha Pool EX-PA-101 Line I/V Gland	380	-	Valve	0	0	0	0	0	0
381	12-06-2025	To Naptha Pool EX-PA-101 Line I/V D/S	381	-	Valve	0	0	0	0	0	0
382	12-06-2025	Naptha To EE-109 EX-PA-101 Line I/V U/S	382	-	Valve	0	0	0	0	0	0
383	12-06-2025	Naptha To EE-109 EX-PA-101 Line I/V Gland	383	-	Valve	0	0	0	0	0	0
384	12-06-2025	Naptha To EE-109 EX-PA-101 Line I/V D/S	384	-	Valve	0	0	0	0	0	0
385	12-06-2025	01-FV-4005 U/S Line I/V U/S Flange	385	-	Flange	0	0	0	0	0	0
386	12-06-2025	01-FV-4005 U/S Line I/V Gland	386	-	Valve	0	0	0	0	0	0
387	12-06-2025	01-FV-4005 U/S Line I/V D/S Flange	387	-	Flange	0	0	0	0	0	0
388	12-06-2025	Drain Line I/V Gland	388	-	Valve	0	0	0	0	0	0
389	12-06-2025	Drain Line Safety Flange	389	-	Flange	0	0	0	0	0	0
390	12-06-2025	01-FV-4005 C/V U/S Flange	390	-	Flange	0	0	0	0	0	0
391	12-06-2025	01-FV-4005 C/V Gland	391	-	Valve	0	0	0	0	0	0
392	12-06-2025	01-FV-4005 C/V D/S Flange	392	-	Flange	0	0	0	0	0	0
393	12-06-2025	Drain Line I/V Gland	393	-	Valve	0	0	0	0	0	0
394	12-06-2025	Drain Line Safety Flange	394	-	Flange	0	0	0	0	0	0
395	12-06-2025	01-FV-4005 D/S Line I/V U/S Flange	395	-	Flange	0	0	0	0	0	0
396	12-06-2025	01-FV-4005 D/S Line I/V Gland	396	-	Valve	0	0	0	0	0	0
397	12-06-2025	01-FV-4005 D/S Line I/V D/S Flange	397	-	Flange	0	0	0	0	0	0
398	12-06-2025	Bypass Line I/V Gland	398	-	Valve	0	0	0	0	0	0
399	12-06-2025	01-PA-CF-012A Suction Line I/V U/S Flange	399	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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400	12-06-2025	01-PA-CF-012A Suction Line I/V Gland	400	-	Valve	0	0	0	0	0	0
401	12-06-2025	01-PA-CF-012A Suction Line I/V D/S Flange	401	-	Flange	0	0	0	0	0	0
402	12-06-2025	Stainer Top Flange	402	-	Flange	0	0	0	0	0	0
403	12-06-2025	Stainer Top Flange I/V Gland	403	-	Valve	0	0	0	0	0	0
404	12-06-2025	Stainer Top Flange Safety Flange	404	-	Flange	0	0	0	0	0	0
405	12-06-2025	Suction Line Flange	405	-	Flange	0	0	0	0	0	0
406	12-06-2025	Pump Seal	406	-	Valve	0	0	0	0	0	0
407	12-06-2025	Discharge Line Flange	407	-	Flange	0	0	0	0	0	0
408	12-06-2025	NRV I/V U/S Flange	408	-	Flange	0	0	0	0	0	0
409	12-06-2025	NRV Top Flange	409	-	Flange	0	0	0	0	0	0
410	12-06-2025	NRV I/V D/S Flange	410	-	Flange	0	0	0	0	0	0
411	12-06-2025	Meter Line 1st I/V Gland	411	-	Valve	0	0	0	0	0	0
412	12-06-2025	Meter Line 2nd I/V Gland	412	-	Valve	0	0	0	0	0	0
413	12-06-2025	Meter line Sampling Point I/V Gland	413	-	Valve	0	0	0	0	0	0
414	12-06-2025	Discharge Line I/V U/S Flange	414	-	Flange	0	0	0	0	0	0
415	12-06-2025	Discharge Line I/V Gland	415	-	Valve	0	0	0	0	0	0
416	12-06-2025	Discharge Line I/V D/S Flange	416	-	Flange	0	0	0	0	0	0
417	12-06-2025	Pump to Drain Line 1st I/V Gland	417	-	Valve	0	0	0	0	0	0
418	12-06-2025	Pump to Drain Line 2nd I/V Gland	418	-	Valve	0	0	0	0	0	0
419	12-06-2025	Pump to Drain Line 3rd I/V Gland	419	-	Valve	0	0	0	0	0	0
420	12-06-2025	Stainer Flange	420	-	Flange	0	0	0	0	0	0
421	12-06-2025	OWS Point	421	-	Valve	0	0	0	0	0	0
422	12-06-2025	01-PV-04 Suction Line I/V U/S Flange	422	-	Flange	0	0	0	0	0	0
423	12-06-2025	01-PV-04 Suction Line I/V Gland	423	-	Valve	0	0	0	0	0	0
424	12-06-2025	01-PV-04 Suction Line I/V D/S Flange	424	-	Flange	0	0	0	0	0	0
425	12-06-2025	Stainer Top Flange	425	-	Flange	0	0	0	0	0	0
426	12-06-2025	Stainer Top Flange I/V Gland	426	-	Valve	0	0	0	0	0	0
427	12-06-2025	Stainer Top Flange Safety Flange	427	-	Flange	0	0	0	0	0	0
428	12-06-2025	Suction Line Flange	428	-	Valve	0	0	0	0	0	0
429	12-06-2025	Discharge Line 1st Flange	429	-	Flange	0	0	0	0	0	0
430	12-06-2025	Discharge Line 2nd Flange	430	-	Flange	0	0	0	0	0	0
431	12-06-2025	Meter Line I/V Gland	431	-	Valve	0	0	0	0	0	0
432	12-06-2025	Meter line Sampling Point I/V Gland	432	-	Valve	0	0	0	0	0	0
433	12-06-2025	NRV I/V U/S Flange	433	-	Flange	0	0	0	0	0	0
434	12-06-2025	NRV Top Flange	434	-	Flange	0	0	0	0	0	0
435	12-06-2025	NRV I/V D/S Flange	435	-	Flange	0	0	0	0	0	0
436	12-06-2025	Discharge Line I/V U/S Flange	436	-	Flange	0	0	0	0	0	0
437	12-06-2025	Discharge Line I/V Gland	437	-	Valve	0	0	0	0	0	0
438	12-06-2025	Discharge Line I/V D/S Flange	438	-	Flange	0	0	0	0	0	0
439	12-06-2025	Drain Line I/V Gland	439	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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440	12-06-2025	Drain Line Safety Flange	440	-	Flange	0	0	0	0	0	0
441	12-06-2025	Pump to Drain Line 1st I/V Gland	441	-	Valve	0	0	0	0	0	0
442	12-06-2025	Pump to Drain Line 2nd I/V Gland	442	-	Valve	0	0	0	0	0	0
443	12-06-2025	Stainer Flange	443	-	Flange	0	0	0	0	0	0
444	12-06-2025	OWS Point	444	-	Valve	0	0	0	0	0	0
445	12-06-2025	01-PV-04A Suction Line I/V U/S Flange	445	-	Flange	0	0	0	0	0	0
446	12-06-2025	01-PV-04A Suction Line I/V Gland	446	-	Valve	0	0	0	0	0	0
447	12-06-2025	01-PV-04A Suction Line I/V D/S Flange	447	-	Flange	0	0	0	0	0	0
448	12-06-2025	Stainer Top Flange	448	-	Flange	0	0	0	0	0	0
449	12-06-2025	Stainer Top Flange I/V Gland	449	-	Valve	0	0	0	0	0	0
450	12-06-2025	Stainer Top Flange Safety Flange	450	-	Flange	0	0	0	0	0	0
451	12-06-2025	Suction Line Flange	451	-	Flange	0	0	0	0	0	0
452	12-06-2025	Pump Seal	452	-	Valve	0	0	0	0	0	0
453	12-06-2025	Discharge Line 1st Flange	453	-	Flange	0	0	0	0	0	0
454	12-06-2025	Discharge Line 2nd Flange	454	-	Flange	0	0	0	0	0	0
455	12-06-2025	Meter line I/V Gland	455	-	Valve	0	0	0	0	0	0
456	12-06-2025	Meter line Sampling Point I/V Gland	456	-	Valve	0	0	0	0	0	0
457	12-06-2025	NRV I/V U/S Flange	457	-	Flange	0	0	0	0	0	0
458	12-06-2025	NRV Top Flange	458	-	Flange	0	0	0	0	0	0
459	12-06-2025	NRV I/V D/S Flange	459	-	Flange	0	0	0	0	0	0
460	12-06-2025	Drain Line I/V Gland	460	-	Valve	0	0	0	0	0	0
461	12-06-2025	Drain Line Safety Flange	461	-	Flange	0	0	0	0	0	0
462	12-06-2025	Discharge Line I/V U/S Flange	462	-	Flange	0	0	0	0	0	0
463	12-06-2025	Discharge Line I/V Gland	463	-	Valve	0	0	0	0	0	0
464	12-06-2025	Discharge Line I/V D/S Flange	464	-	Flange	0	0	0	0	0	0
465	12-06-2025	Pump to Drain Line 1st I/V Gland	465	-	Valve	0	0	0	0	0	0
466	12-06-2025	Pump to Drain Line 2nd I/V Gland	466	-	Valve	0	0	0	0	0	0
467	12-06-2025	Stainer Flange	467	-	Flange	0	0	0	0	0	0
468	12-06-2025	OWS Point	468	-	Valve	0	0	0	0	0	0
469	12-06-2025	01-PA-CF-013-B Suction Line I/V U/S Flange	469	-	Flange	0	0	0	0	0	0
470	12-06-2025	01-PA-CF-013-B Suction Line I/V Gland	470	-	Valve	0	0	0	0	0	0
471	12-06-2025	01-PA-CF-013-B Suction Line I/V D/S Flange	471	-	Flange	0	0	0	0	0	0
472	12-06-2025	Stainer Top Flange	472	-	Flange	0	0	0	0	0	0
473	12-06-2025	Stainer Top Flange I/V Gland	473	-	Valve	0	0	0	0	0	0
474	12-06-2025	Stainer Top Flange Safety Flange	474	-	Flange	0	0	0	0	0	0
475	12-06-2025	Suction Line Flange	475	-	Flange	0	0	0	0	0	0
476	12-06-2025	Pump Seal	476	-	Valve	0	0	0	0	0	0
477	12-06-2025	Discharge Line 1st Flange	477	-	Flange	0	0	0	0	0	0
478	12-06-2025	Discharge Line 2nd Flange	478	-	Flange	0	0	0	0	0	0
479	12-06-2025	Meter line I/V Gland	479	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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480	12-06-2025	Meter line Sampling Point I/V Gland	480	-	Valve	0	0	0	0	0	0
481	12-06-2025	NRV I/V U/S Flange	481	-	Flange	0	0	0	0	0	0
482	12-06-2025	NRV Top Flange	482	-	Flange	0	0	0	0	0	0
483	12-06-2025	NRV I/V D/S Flange	483	-	Flange	0	0	0	0	0	0
484	12-06-2025	Discharge Line I/V U/S Flange	484	-	Flange	0	0	0	0	0	0
485	12-06-2025	Discharge Line I/V Gland	485	-	Valve	0	0	0	0	0	0
486	12-06-2025	Discharge Line I/V D/S Flange	486	-	Flange	0	0	0	0	0	0
487	12-06-2025	Pump to Drain Line 1st I/V Gland	487	-	Valve	0	0	0	0	0	0
488	12-06-2025	Pump to Drain Line 2nd I/V Gland	488	-	Valve	0	0	0	0	0	0
489	12-06-2025	Pump to Drain Line 3rd I/V Gland	489	-	Valve	0	0	0	0	0	0
490	12-06-2025	Stainer Flange	490	-	Flange	0	0	0	0	0	0
491	12-06-2025	OWS Point	491	-	Valve	0	0	0	0	0	0
492	12-06-2025	01-PA-CF-013-A Suction Line I/V U/S Flange	492	-	Flange	0	0	0	0	0	0
493	12-06-2025	01-PA-CF-013-B Suction Line I/V Gland	493	-	Valve	0	0	0	0	0	0
494	12-06-2025	01-PA-CF-013-B Suction Line I/V D/S Flange	494	-	Flange	0	0	0	0	0	0
495	12-06-2025	Stainer Top Flange	495	-	Flange	0	0	0	0	0	0
496	12-06-2025	Stainer Top Flange I/V Gland	496	-	Valve	0	0	0	0	0	0
497	12-06-2025	Stainer Top Flange Safety Flange	497	-	Flange	0	0	0	0	0	0
498	12-06-2025	Suction Line Flange	498	-	Flange	0	0	0	0	0	0
499	12-06-2025	Pump Seal	499	-	Valve	0	0	0	0	0	0
500	12-06-2025	Discharge Line 1st Flange	500	-	Flange	0	0	0	0	0	0
501	12-06-2025	Discharge Line 2nd Flange	501	-	Flange	0	0	0	0	0	0
502	12-06-2025	Meter line I/V Gland	502	-	Valve	0	0	0	0	0	0
503	12-06-2025	Meter line Sampling Point I/V Gland	503	-	Valve	0	0	0	0	0	0
504	12-06-2025	NRV I/V U/S Flange	504	-	Flange	0	0	0	0	0	0
505	12-06-2025	NRV Top Flange	505	-	Flange	0	0	0	0	0	0
506	12-06-2025	NRV I/V D/S Flange	506	-	Flange	0	0	0	0	0	0
507	12-06-2025	Discharge Line I/V U/S Flange	507	-	Flange	0	0	0	0	0	0
508	12-06-2025	Discharge Line I/V Gland	508	-	Valve	0	0	0	0	0	0
509	12-06-2025	Discharge Line I/V D/S Flange	509	-	Flange	0	0	0	0	0	0
510	12-06-2025	Pump to Drain Line 1st I/V Gland	510	-	Valve	0	0	0	0	0	0
511	12-06-2025	Pump to Drain Line 2nd I/V Gland	511	-	Valve	0	0	0	0	0	0
512	12-06-2025	Pump to Drain Line 3rd I/V Gland	512	-	Valve	0	0	0	0	0	0
513	12-06-2025	Stainer Flange	513	-	Flange	0	0	0	0	0	0
514	12-06-2025	OWS Point	514	-	Valve	0	0	0	0	0	0
515	12-06-2025	01-FV-1505 U/S Line I/V U/S Flange	515	-	Flange	0	0	0	0	0	0
516	12-06-2025	01-FV-1505 U/S Line I/V Gland	516	-	Valve	0	0	0	0	0	0
517	12-06-2025	01-FV-1505 U/S Line I/V D/S Flange	517	-	Flange	0	0	0	0	0	0
518	12-06-2025	Drain Line I/V Gland	518	-	Valve	0	0	0	0	0	0
519	12-06-2025	Drain Line Safety Flange	519	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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520	12-06-2025	01-FV-1505 C/V U/S Flange	520	-	Flange	0	0	0	0	0	0
521	12-06-2025	01-FV-1505 C/V Gland	521	-	Valve	0	0	0	0	0	0
522	12-06-2025	01-FV-1505 C/V D/S Flange	522	-	Flange	0	0	0	0	0	0
523	12-06-2025	01-FV-1505 D/S Line I/V U/S Flange	523	-	Flange	0	0	0	0	0	0
524	12-06-2025	01-FV-1505 D/S Line I/V Gland	524	-	Valve	0	0	0	0	0	0
525	12-06-2025	01-FV-1505 D/S Line I/V D/S Flange	525	-	Flange	0	0	0	0	0	0
526	12-06-2025	Bypass Line I/V U/S Flange	526	-	Flange	0	0	0	0	0	0
527	12-06-2025	Bypass Line I/V U/S Gland	527	-	Valve	0	0	0	0	0	0
528	12-06-2025	Bypass Line I/V D/S Flange	528	-	Flange	0	0	0	0	0	0
529	12-06-2025	01-PV-2002 U/S line I/V Gland	529	-	Valve	0	0	0	0	0	0
530	12-06-2025	Drain Line I/V Gland	530	-	Valve	0	0	0	0	0	0
531	12-06-2025	Drain Line Safety Flange	531	-	Flange	0	0	0	0	0	0
532	12-06-2025	01-PV-2002 D/S line I/V Gland	532	-	Valve	0	0	0	0	0	0
533	12-06-2025	Drain Line I/V Gland	533	-	Valve	0	0	0	0	0	0
534	12-06-2025	Drain Line Safety Flange	534	-	Flange	0	0	0	0	0	0
535	12-06-2025	Bypass Line I/V Gland	535	-	Valve	0	0	0	0	0	0
536	12-06-2025	01-PV-1402 U/S line I/V Gland	536	-	Valve	0	0	0	0	0	0
537	12-06-2025	Drain Line I/V Gland	537	-	Valve	0	0	0	0	0	0
538	12-06-2025	Drain Line Safety Flange	538	-	Flange	0	0	0	0	0	0
539	12-06-2025	01-PV-1402 C/V Gland	539	-	Valve	0	0	0	0	0	0
540	12-06-2025	01-PV-1402 D/S Line I/V Gland	540	-	Valve	0	0	0	0	0	0
541	12-06-2025	Drain Line I/V Gland	541	-	Valve	0	0	0	0	0	0
542	12-06-2025	Drain Line Safety Flange	542	-	Flange	0	0	0	0	0	0
543	12-06-2025	Bypass Line I/V Gland	543	-	Valve	0	0	0	0	0	0
544	12-06-2025	01-PV-1401 U/S Line I/V Gland	544	-	Valve	0	0	0	0	0	0
545	12-06-2025	Drain Line I/V Gland	545	-	Valve	0	0	0	0	0	0
546	12-06-2025	Drain Line Safety Flange	546	-	Flange	0	0	0	0	0	0
547	12-06-2025	01-PV-1401 C/V U/S Flange	547	-	Flange	0	0	0	0	0	0
548	12-06-2025	01-PV-1401 C/V Gland	548	-	Valve	0	0	0	0	0	0
549	12-06-2025	01-PV-1401 C/V D/S Flange	549	-	Flange	0	0	0	0	0	0
550	12-06-2025	01-PV-1401 D/S Line I/V Gland	550	-	Valve	0	0	0	0	0	0
551	12-06-2025	Drain Line I/V Gland	551	-	Valve	0	0	0	0	0	0
552	12-06-2025	Drain Line Safety Flange	552	-	Flange	0	0	0	0	0	0
553	12-06-2025	Bypass Line I/V Gland	553	-	Valve	0	0	0	0	0	0
554	12-06-2025	01-SDV-1401 C/V U/S Flange	554	-	Flange	0	0	0	0	0	0
555	12-06-2025	01-SDV-1401 C/V Gland	555	-	Valve	0	0	0	0	0	0
556	12-06-2025	01-SDV-1401 C/V D/S Flange	556	-	Flange	0	0	0	0	0	0
557	12-06-2025	Drain Line I/V Gland	557	-	Valve	0	0	0	0	0	0
558	12-06-2025	Drain Line Safety Flange	558	-	Flange	0	0	0	0	0	0
559	12-06-2025	01-FV-3804 D/S Line I/V U/S Flange	559	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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560	12-06-2025	01-FV-3804 D/S Line I/V Gland	560	-	Valve	0	0	0	0	0	0
561	12-06-2025	01-FV-3804 D/S Line I/V D/S Flange	561	-	Flange	0	0	0	0	0	0
562	12-06-2025	01-FV-3804 C/V U/S Flange	562	-	Flange	0	0	0	0	0	0
563	12-06-2025	01-FV-3804 C/V Gland	563	-	Valve	0	0	0	0	0	0
564	12-06-2025	01-FV-3804 C/V D/S Flange	564	-	Flange	0	0	0	0	0	0
565	12-06-2025	01-FV-2702 C/V U/S Flange	565	-	Flange	0	0	0	0	0	0
566	12-06-2025	01-FV-2702 C/V Gland	566	-	Valve	0	0	0	0	0	0
567	12-06-2025	01-FV-2702 C/V D/S Flange	567	-	Flange	0	0	0	0	0	0
568	12-06-2025	01-FV-1702 C/V U/S Flange	568	-	Flange	0	0	0	0	0	0
569	12-06-2025	01-FV-1702 C/V Gland	569	-	Valve	0	0	0	0	0	0
570	12-06-2025	01-FV-1702 C/V D/S Flange	570	-	Flange	0	0	0	0	0	0
571	12-06-2025	Drain Line I/V Gland	571	-	Valve	0	0	0	0	0	0
572	12-06-2025	Drain Line Safety Flange	572	-	Flange	0	0	0	0	0	0
573	12-06-2025	Furnace	573	-	Valve			0	0	0	0
574	12-06-2025	B.No. - 1 Fuel Gas line I/V U/S Flange	574	-	Flange	0	0	0	0	0	0
575	12-06-2025	B.No. - 1 Fuel Gas line I/V Gland	575	-	Valve	0	0	0	0	0	0
576	12-06-2025	B.No. - 1 Fuel Gas line I/V D/S Flange	576	-	Flange	0	0	0	0	0	0
577	12-06-2025	Pilot Gas line I/V U/S Flange	577	-	Flange	0	0	0	0	0	0
578	12-06-2025	Pilot Gas line I/V Gland	578	-	Valve	0	0	0	0	0	0
579	12-06-2025	Pilot Gas line I/V D/S Flange	579	-	Flange	0	0	0	0	0	0
580	12-06-2025	B.No. - 2 Fuel Gas line I/V U/S Flange	580	-	Flange	0	0	0	0	0	0
581	12-06-2025	B.No. - 2 Fuel Gas line I/V Gland	581	-	Valve	0	0	0	0	0	0
582	12-06-2025	B.No. - 2 Fuel Gas line I/V D/S Flange	582	-	Flange	0	0	0	0	0	0
583	12-06-2025	Pilot Gas line I/V Gland	583	-	Valve	0	0	0	0	0	0
584	12-06-2025	B.No. - 3 Fuel Gas line I/V Gland	584	-	Valve	0	0	0	0	0	0
585	12-06-2025	Pilot Gas line I/V Gland	585	-	Valve	0	0	0	0	0	0
586	12-06-2025	B.No. - 4 Fuel Gas line I/V U/S Flange	586	-	Flange	0	0	0	0	0	0
587	12-06-2025	B.No. - 4 Fuel Gas line I/V Gland	587	-	Valve	0	0	0	0	0	0
588	12-06-2025	B.No. - 4 Fuel Gas line I/V D/S Flange	588	-	Flange	0	0	0	0	0	0
589	12-06-2025	Pilot Gas line I/V U/S Flange	589	-	Flange	0	0	0	0	0	0
590	12-06-2025	Pilot Gas line I/V Gland	590	-	Valve	0	0	0	0	0	0
591	12-06-2025	Pilot Gas line I/V D/S Flange	591	-	Flange	0	0	0	0	0	0
592	12-06-2025	B.No. - 5 Fuel Gas line I/V U/S Flange	592	-	Flange	0	0	0	0	0	0
593	12-06-2025	B.No. - 5 Fuel Gas line I/V Gland	593	-	Valve	0	0	0	0	0	0
594	12-06-2025	B.No. - 5 Fuel Gas line I/V D/S Flange	594	-	Flange	0	0	0	0	0	0
595	12-06-2025	Pilot Gas line I/V U/S Flange	595	-	Flange	0	0	0	0	0	0
596	12-06-2025	Pilot Gas line I/V Gland	596	-	Valve	0	0	0	0	0	0
597	12-06-2025	Pilot Gas line I/V D/S Flange	597	-	Flange	0	0	0	0	0	0
598	12-06-2025	B.No. - 6 Fuel Gas line I/V Gland	598	-	Valve	0	0	0	0	0	0
599	12-06-2025	Pilot Gas line I/V Gland	599	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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600	12-06-2025	B.No. - 7 Fuel Gas line I/V U/S Flange	600	-	Flange	0	0	0	0	0	0
601	12-06-2025	B.No. - 7 Fuel Gas line I/V Gland	601	-	Valve	0	0	0	0	0	0
602	12-06-2025	B.No. - 7 Fuel Gas line I/V D/S Flange	602	-	Flange	0	0	0	0	0	0
603	12-06-2025	Pilot Gas line I/V U/S Flange	603	-	Flange	0	0	0	0	0	0
604	12-06-2025	Pilot Gas line I/V Gland	604	-	Valve	0	0	0	0	0	0
605	12-06-2025	Pilot Gas line I/V D/S Flange	605	-	Flange	0	0	0	0	0	0
606	12-06-2025	B.No. - 8 Fuel Gas line I/V U/S Flange	606	-	Flange	0	0	0	0	0	0
607	12-06-2025	B.No. - 8 Fuel Gas line I/V Gland	607	-	Valve	0	0	0	0	0	0
608	12-06-2025	B.No. - 8 Fuel Gas line I/V D/S Flange	608	-	Flange	0	0	0	0	0	0
609	12-06-2025	Pilot Gas line I/V U/S Flange	609	-	Flange	0	0	0	0	0	0
610	12-06-2025	Pilot Gas line I/V Gland	610	-	Valve	0	0	0	0	0	0
611	12-06-2025	Pilot Gas line I/V D/S Flange	611	-	Flange	0	0	0	0	0	0
612	12-06-2025	B.No. - 1 Pilot Gas line I/V U/S Flange	612	-	Flange	0	0	0	0	0	0
613	12-06-2025	B.No. - 1 Pilot Gas line I/V Gland	613	-	Valve	0	0	0	0	0	0
614	12-06-2025	B.No. - 1 Pilot Gas line I/V D/S Flange	614	-	Flange	0	0	0	0	0	0
615	12-06-2025	B.No. - 1 Fuel Gas line I/V U/S Flange	615	-	Flange	0	0	0	0	0	0
616	12-06-2025	B.No. - 1 Fuel Gas line I/V Gland	616	-	Valve	0	0	0	0	0	0
617	12-06-2025	B.No. - 1 Fuel Gas line I/V D/S Flange	617	-	Flange	0	0	0	0	0	0
618	12-06-2025	B.No. - 2 Pilot Gas line I/V Gland	618	-	Valve	0	0	0	0	0	0
619	12-06-2025	B.No. - 2 Fuel Gas line I/V U/S Flange	619	-	Flange	0	0	0	0	0	0
620	12-06-2025	B.No. - 2 Fuel Gas line I/V Gland	620	-	Valve	0	0	0	0	0	0
621	12-06-2025	B.No. - 2 Fuel Gas line I/V D/S Flange	621	-	Flange	0	0	0	0	0	0
622	12-06-2025	B.No. - 3 Pilot Gas line I/V U/S Flange	622	-	Flange	0	0	0	0	0	0
623	12-06-2025	B.No. - 3 Pilot Gas line I/V Gland	623	-	Valve	0	0	0	0	0	0
624	12-06-2025	B.No. - 3 Pilot Gas line I/V D/S Flange	624	-	Flange	0	0	0	0	0	0
625	12-06-2025	B.No. - 3 Fuel Gas line I/V Gland	625	-	Valve	0	0	0	0	0	0
626	12-06-2025	B.No. - 4 Pilot Gas line I/V Gland	626	-	Valve	0	0	0	0	0	0
627	12-06-2025	B.No. - 4 Fuel Gas line I/V Gland	627	-	Valve	0	0	0	0	0	0
628	12-06-2025	B.No. - 5 Pilot Gas line I/V U/S Flange	628	-	Flange	0	0	0	0	0	0
629	12-06-2025	B.No. - 5 Pilot Gas line I/V Gland	629	-	Valve	0	0	0	0	0	0
630	12-06-2025	B.No. - 5 Pilot Gas line I/V D/S Flange	630	-	Flange	0	0	0	0	0	0
631	12-06-2025	B.No. - 5 Fuel Gas line I/V Gland	631	-	Valve	0	0	0	0	0	0
632	12-06-2025	B.No. - 6 Pilot Gas line I/V U/S Flange	632	-	Flange	0	0	0	0	0	0
633	12-06-2025	B.No. - 6 Pilot Gas line I/V Gland	633	-	Valve	0	0	0	0	0	0
634	12-06-2025	B.No. - 6 Pilot Gas line I/V D/S Flange	634	-	Valve	0	0	0	0	0	0
635	12-06-2025	B.No. - 6 Fuel Gas line I/V U/S Flange	635	-	Flange	0	0	0	0	0	0
636	12-06-2025	B.No. - 6 Fuel Gas line I/V Gland	636	-	Valve	0	0	0	0	0	0
637	12-06-2025	B.No. - 6 Fuel Gas line I/V D/S Flange	637	-	Flange	0	0	0	0	0	0
638	12-06-2025	B.No. - 7 Pilot Gas line I/V U/S Flange	638	-	Flange	0	0	0	0	0	0
639	12-06-2025	B.No. - 7 Pilot Gas line I/V Gland	639	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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640	12-06-2025	B.No. - 7 Pilot Gas line I/V D/S Flange	640	-	Flange	0	0	0	0	0	0
641	12-06-2025	B.No. - 7 Fuel Gas line I/V U/S Flange	641	-	Flange	0	0	0	0	0	0
642	12-06-2025	B.No. - 7 Fuel Gas line I/V Gland	642	-	Valve	0	0	0	0	0	0
643	12-06-2025	B.No. - 7 Fuel Gas line I/V D/S Flange	643	-	Flange	0	0	0	0	0	0
644	12-06-2025	B.No. - 8 Pilot Gas line I/V U/S Flange	644	-	Flange	0	0	0	0	0	0
645	12-06-2025	B.No. - 8 Pilot Gas line I/V Gland	645	-	Valve	0	0	0	0	0	0
646	12-06-2025	B.No. - 8 Pilot Gas line I/V D/S Flange	646	-	Flange	0	0	0	0	0	0
647	12-06-2025	B.No. - 8 Fuel Gas line I/V U/S Flange	647	-	Flange	0	0	0	0	0	0
648	12-06-2025	B.No. - 8 Fuel Gas line I/V Gland	648	-	Valve	0	0	0	0	0	0
649	12-06-2025	B.No. - 8 Fuel Gas line I/V D/S Flange	649	-	Flange	0	0	0	0	0	0
650	12-06-2025	B.No. - 9 Pilot Gas line I/V U/S Flange	650	-	Flange	0	0	0	0	0	0
651	12-06-2025	B.No. - 9 Pilot Gas line I/V Gland	651	-	Valve	0	0	0	0	0	0
652	12-06-2025	B.No. - 9 Pilot Gas line I/V D/S Flange	652	-	Flange	0	0	0	0	0	0
653	12-06-2025	B.No. - 9 Fuel Gas line I/V U/S Flange	653	-	Flange	0	0	0	0	0	0
654	12-06-2025	B.No. - 9 Fuel Gas line I/V Gland	654	-	Valve	0	0	0	0	0	0
655	12-06-2025	B.No. - 9 Fuel Gas line I/V D/S Flange	655	-	Flange	0	0	0	0	0	0
656	12-06-2025	B.No. - 10 Pilot Gas line I/V U/S Flange	656	-	Flange	0	0	0	0	0	0
657	12-06-2025	B.No. - 10 Pilot Gas line I/V Gland	657	-	Valve	0	0	0	0	0	0
658	12-06-2025	B.No. - 10 Pilot Gas line I/V D/S Flange	658	-	Flange	0	0	0	0	0	0
659	12-06-2025	B.No. - 10 Fuel Gas line I/V U/S Flange	659	-	Flange	0	0	0	0	0	0
660	12-06-2025	B.No. - 10 Fuel Gas line I/V Gland	660	-	Valve	0	0	0	0	0	0
661	12-06-2025	B.No. - 10 Fuel Gas line I/V D/S Flange	661	-	Flange	0	0	0	0	0	0
662	12-06-2025	B.No. - 11 Pilot Gas line I/V U/S Flange	662	-	Flange	0	0	0	0	0	0
663	12-06-2025	B.No. - 11 Pilot Gas line I/V Gland	663	-	Valve	0	0	0	0	0	0
664	12-06-2025	B.No. - 11 Pilot Gas line I/V D/S Flange	664	-	Flange	0	0	0	0	0	0
665	12-06-2025	B.No. - 11 Fuel Gas line I/V U/S Flange	665	-	Flange	0	0	0	0	0	0
666	12-06-2025	B.No. - 11 Fuel Gas line I/V Gland	666	-	Valve	0	0	0	0	0	0
667	12-06-2025	B.No. - 11 Fuel Gas line I/V D/S Flange	667	-	Flange	0	0	0	0	0	0
668	12-06-2025	B.No. - 12 Pilot Gas line I/V U/S Flange	668	-	Flange	0	0	0	0	0	0
669	12-06-2025	B.No. - 12 Pilot Gas line I/V Gland	669	-	Valve	0	0	0	0	0	0
670	12-06-2025	B.No. - 12 Pilot Gas line I/V D/S Flange	670	-	Flange	0	0	0	0	0	0
671	12-06-2025	B.No. - 12 Fuel Gas line I/V U/S Flange	671	-	Flange	0	0	0	0	0	0
672	12-06-2025	B.No. - 12 Fuel Gas line I/V Gland	672	-	Valve	0	0	0	0	0	0
673	12-06-2025	B.No. - 12 Fuel Gas line I/V D/S Flange	673	-	Flange	0	0	0	0	0	0
674	12-06-2025	B.No. - 13 Pilot Gas line I/V U/S Flange	674	-	Flange	0	0	0	0	0	0
675	12-06-2025	B.No. - 13 Pilot Gas line I/V Gland	675	-	Valve	0	0	0	0	0	0
676	12-06-2025	B.No. - 13 Pilot Gas line I/V D/S Flange	676	-	Flange	0	0	0	0	0	0
677	12-06-2025	B.No. - 13 Fuel Gas line I/V U/S Flange	677	-	Flange	0	0	0	0	0	0
678	12-06-2025	B.No. - 13 Fuel Gas line I/V Gland	678	-	Valve	0	0	0	0	0	0
679	12-06-2025	B.No. - 13 Fuel Gas line I/V D/S Flange	679	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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680	12-06-2025	B.No. - 14 Pilot Gas line I/V U/S Flange	680	-	Flange	0	0	0	0	0	0
681	12-06-2025	B.No. - 14 Pilot Gas line I/V Gland	681	-	Valve	0	0	0	0	0	0
682	12-06-2025	B.No. - 14 Pilot Gas line I/V D/S Flange	682	-	Flange	0	0	0	0	0	0
683	12-06-2025	B.No. - 14 Fuel Gas line I/V U/S Flange	683	-	Flange	0	0	0	0	0	0
684	12-06-2025	B.No. - 14 Fuel Gas line I/V Gland	684	-	Valve	0	0	0	0	0	0
685	12-06-2025	B.No. - 14 Fuel Gas line I/V D/S Flange	685	-	Flange	0	0	0	0	0	0
686	12-06-2025	B.No. - 15 Pilot Gas line I/V U/S Flange	686	-	Flange	0	0	0	0	0	0
687	12-06-2025	B.No. - 15 Pilot Gas line I/V Gland	687	-	Valve	0	0	0	0	0	0
688	12-06-2025	B.No. - 15 Pilot Gas line I/V D/S Flange	688	-	Flange	0	0	0	0	0	0
689	12-06-2025	B.No. - 15 Fuel Gas line I/V U/S Flange	689	-	Flange	0	0	0	0	0	0
690	12-06-2025	B.No. - 15 Fuel Gas line I/V Gland	690	-	Valve	0	0	0	0	0	0
691	12-06-2025	B.No. - 15 Fuel Gas line I/V D/S Flange	691	-	Flange	0	0	0	0	0	0
692	12-06-2025	B.No. - 16 Pilot Gas line I/V U/S Flange	692	-	Flange	0	0	0	0	0	0
693	12-06-2025	B.No. - 16 Pilot Gas line I/V Gland	693	-	Valve	0	0	0	0	0	0
694	12-06-2025	B.No. - 16 Pilot Gas line I/V D/S Flange	694	-	Flange	0	0	0	0	0	0
695	12-06-2025	B.No. - 16 Fuel Gas line I/V U/S Flange	695	-	Flange	0	0	0	0	0	0
696	12-06-2025	B.No. - 16 Fuel Gas line I/V Gland	696	-	Valve	0	0	0	0	0	0
697	12-06-2025	B.No. - 16 Fuel Gas line I/V D/S Flange	697	-	Flange	0	0	0	0	0	0
698	12-06-2025	B.No. - 17 Pilot Gas line I/V U/S Flange	698	-	Flange	0	0	0	0	0	0
699	12-06-2025	B.No. - 17 Pilot Gas line I/V Gland	699	-	Valve	0	0	0	0	0	0
700	12-06-2025	B.No. - 17 Pilot Gas line I/V D/S Flange	700	-	Flange	0	0	0	0	0	0
701	12-06-2025	B.No. - 17 Fuel Gas line I/V U/S Flange	701	-	Flange	0	0	0	0	0	0
702	12-06-2025	B.No. - 17 Fuel Gas line I/V Gland	702	-	Valve	0	0	0	0	0	0
703	12-06-2025	B.No. - 17 Fuel Gas line I/V D/S Flange	703	-	Flange	0	0	0	0	0	0
704	12-06-2025	B.No. - 18 Pilot Gas line I/V U/S Flange	704	-	Flange	0	0	0	0	0	0
705	12-06-2025	B.No. - 18 Pilot Gas line I/V Gland	705	-	Valve	0	0	0	0	0	0
706	12-06-2025	B.No. - 18 Pilot Gas line I/V D/S Flange	706	-	Flange	0	0	0	0	0	0
707	12-06-2025	B.No. - 18 Fuel Gas line I/V U/S Flange	707	-	Flange	0	0	0	0	0	0
708	12-06-2025	B.No. - 18 Fuel Gas line I/V Gland	708	-	Valve	0	0	0	0	0	0
709	12-06-2025	B.No. - 18 Fuel Gas line I/V D/S Flange	709	-	Flange	0	0	0	0	0	0
710	12-06-2025	B.No. - 19 Pilot Gas line I/V U/S Flange	710	-	Flange	0	0	0	0	0	0
711	12-06-2025	B.No. - 19 Pilot Gas line I/V Gland	711	-	Valve	0	0	0	0	0	0
712	12-06-2025	B.No. - 19 Pilot Gas line I/V D/S Flange	712	-	Flange	0	0	0	0	0	0
713	12-06-2025	B.No. - 19 Fuel Gas line I/V U/S Flange	713	-	Flange	0	0	0	0	0	0
714	12-06-2025	B.No. - 19 Fuel Gas line I/V Gland	714	-	Valve	0	0	0	0	0	0
715	12-06-2025	B.No. - 19 Fuel Gas line I/V D/S Flange	715	-	Flange	0	0	0	0	0	0
716	12-06-2025	B.No. - 20 Pilot Gas line I/V U/S Flange	716	-	Flange	0	0	0	0	0	0
717	12-06-2025	B.No. - 20 Pilot Gas line I/V Gland	717	-	Valve	0	0	0	0	0	0
718	12-06-2025	B.No. - 20 Pilot Gas line I/V D/S Flange	718	-	Flange	0	0	0	0	0	0
719	12-06-2025	B.No. - 20 Fuel Gas line I/V U/S Flange	719	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
720	12-06-2025	B.No. - 20 Fuel Gas line I/V Gland	720	-	Valve	0	0	0	0	0	0
721	12-06-2025	B.No. - 20 Fuel Gas line I/V D/S Flange	721	-	Flange	0	0	0	0	0	0
722	12-06-2025	01-FV-1906-HEAVY NAPHTHA TO STAB NAPHTHA LINE-(I/V GLAND)	722	-	Valve	0	0	0	0	0	0
723	12-06-2025	01-FV-1903-LPG BYPASS LINE -(I/V GLAND)	723	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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WAX-SDU TANK NO-43-TT-CR-101-A/B SRIVCE MVGO											
1	13-06-2025	Suction Line I/V U/s Flange	1	-	Flange	0	0	0	0	0	0
2	13-06-2025	I/V Gland	2	-	Valve	0	0	0	0	0	0
3	13-06-2025	I/V D/S Flange	3	-	Flange	0	0	0	0	0	0
4	13-06-2025	Drain Line I/V Gland	4	-	Valve	0	0	0	0	0	0
5	13-06-2025	Drain Line Safety Flange	5	-	Flange	0	0	0	0	0	0
6	13-06-2025	Discharge Line I/V U/S Flange	6	-	Flange	0	0	0	0	0	0
7	13-06-2025	I/V Gland	7	-	Valve	0	0	0	0	0	0
8	13-06-2025	I/V D/S Flange	8	-	Flange	0	0	0	0	0	0
9	13-06-2025	Pump Seal	9	-	Valve	0	0	0	0	0	0
10	13-06-2025	Meter Line I/V Gland	10	-	Valve	0	0	0	0	0	0
11	13-06-2025	OWS Point	11	-	Valve	0	0	0	0	0	0
12	13-06-2025	18PA109B Suction Line I/V U/S Flange	12	-	Flange	0	0	0	0	0	0
13	13-06-2025	I/V Gland	13	-	Valve	0	0	0	0	0	0
14	13-06-2025	I/V D/S Flange	14	-	Valve	0	0	0	0	0	0
15	13-06-2025	Drain Line I/V Gland	15	-	Valve	0	0	0	0	0	0
16	13-06-2025	Drain Line Safety Flange	16	-	Valve	0	0	0	0	0	0
17	13-06-2025	Discharge Line I/V U/S Flange	17	-	Flange	0	0	0	0	0	0
18	13-06-2025	I/V Gland	18	-	Valve	0	0	0	0	0	0
19	13-06-2025	I/V D/S Flange	19	-	Flange	0	0	0	0	0	0
20	13-06-2025	Pump Seal	20	-	Valve	0	0	0	0	0	0
21	13-06-2025	Meter Line 1st I/V Gland	21	-	Valve	0	0	0	0	0	0
22	13-06-2025	Meter Line 2nd I/V Gland	22	-	Valve	0	0	0	0	0	0
23	13-06-2025	OWS Point	23	-	Valve	0	0	0	0	0	0
24	13-06-2025	18PA105A Suction Line I/V U/s Flange	24	-	Flange	0	0	0	0	0	0
25	13-06-2025	I/V Gland	25	-	Valve	0	0	0	0	0	0
26	13-06-2025	I/V D/S Flange	26	-	Valve	0	0	0	0	0	0
27	13-06-2025	Drain Line I/V Gland	27	-	Valve	0	0	0	0	0	0
28	13-06-2025	Drain Line Safety Flange	28	-	Valve	0	0	0	0	0	0
29	13-06-2025	Meter Line 1st I/V Gland	29	-	Valve	0	0	0	0	0	0
30	13-06-2025	Meter Line 2nd I/V Gland	30	-	Valve	0	0	0	0	0	0
31	13-06-2025	Pump Seal	31	-	Valve	0	0	0	0	0	0
32	13-06-2025	18PA105B Suction Line I/V U/S Flange	32	-	Flange	0	0	0	0	0	0
33	13-06-2025	I/V Gland	33	-	Valve	0	0	0	0	0	0
34	13-06-2025	I/V D/S Flange	34	-	Flange	0	0	0	0	0	0
35	13-06-2025	Discharge Line I/V Gland	35	-	Valve	0	0	0	0	0	0
36	13-06-2025	I/V D/S Flange	36	-	Flange	0	0	0	0	0	0
37	13-06-2025	Drain Line I/V Gland	37	-	Valve	0	0	0	0	0	0
38	13-06-2025	Drain Line Safety Flange	38	-	Flange	0	0	0	0	0	0
39	13-06-2025	Meter Line 1st I/V Gland	39	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	13-06-2025	Meter Line 2nd I/V gland	40	-	Valve	0	0	0	0	0	0
41	13-06-2025	OWS Point	41	-	Valve	0	0	0	0	0	0
42	13-06-2025	18PA105C Suction Line I/V U/S flange	42	-	Flange	0	0	0	0	0	0
43	13-06-2025	I/V Gland	43	-	Valve	0	0	0	0	0	0
44	13-06-2025	I/V D/S Flange	44	-	Flange	0	0	0	0	0	0
45	13-06-2025	Discharge line I/V U/S Flange	45	-	Flange	0	0	0	0	0	0
46	13-06-2025	I/V Gland	46	-	Valve	0	0	0	0	0	0
47	13-06-2025	I/V D/S Flange	47	-	Flange	0	0	0	0	0	0
48	13-06-2025	Pump Seal	48	-	Valve	0	0	0	0	0	0
49	13-06-2025	Drain line I/V Gland	49	-	Valve	0	0	0	0	0	0
50	13-06-2025	Drain Line Safety Flange	50	-	Flange	0	0	0	0	0	0
51	13-06-2025	Meter Line 1st I/V Gland	51	-	Valve	0	0	0	0	0	0
52	13-06-2025	Meter Line 2nd I/V Gland	52	-	Valve	0	0	0	0	0	0
53	13-06-2025	OWS Point	53	-	Valve	0	0	0	0	0	0
54	13-06-2025	18PA105D Suction Line I/V U/S Flange	54	-	Flange	0	0	0	0	0	0
55	13-06-2025	I/V Gland	55	-	Valve	0	0	0	0	0	0
56	13-06-2025	I/V D/S Flange	56	-	Flange	0	0	0	0	0	0
57	13-06-2025	Pump Seal	57	-	Valve	0	0	0	0	0	0
58	13-06-2025	Drain line I/V Gland	58	-	Valve	0	0	0	0	0	0
59	13-06-2025	Drain Line Safety Flange	59	-	Flange	0	0	0	0	0	0
60	13-06-2025	Meter Line 1st I/V Gland	60	-	Valve	0	0	0	0	0	0
61	13-06-2025	Meter Line 2nd I/V Gland	61	-	Valve	0	0	0	0	0	0
62	13-06-2025	OWS Point	62	-	Valve	0	0	0	0	0	0
63	13-06-2025	LV1902 Suction Line I/V U/S Flange	63	-	Flange	0	0	0	0	0	0
64	13-06-2025	I/V Gland	64	-	Valve	0	0	0	0	0	0
65	13-06-2025	I/V D/S Flange	65	-	Flange	0	0	0	0	0	0
66	13-06-2025	Drain line I/V Gland	66	-	Valve	0	0	0	0	0	0
67	13-06-2025	Drain Line Safety Flange	67	-	Flange	0	0	0	0	0	0
68	13-06-2025	1902CV Gland	68	-	Valve	0	0	0	0	0	0
69	13-06-2025	Discharge Line I/V Gland	69	-	Valve	0	0	0	0	0	0
70	13-06-2025	Discharge Line Drain Line I/V Gland	70	-	Valve	0	0	0	0	0	0
71	13-06-2025	Drain Line Safety Flange	71	-	Flange	0	0	0	0	0	0
72	13-06-2025	LV2002 Suction Line I/V U/S Flange	72	-	Flange	0	0	0	0	0	0
73	13-06-2025	I/V Gland	73	-	Valve	0	0	0	0	0	0
74	13-06-2025	I/V D/S Flange	74	-	Flange	0	0	0	0	0	0
75	13-06-2025	Drain line I/V Gland	75	-	Valve	0	0	0	0	0	0
76	13-06-2025	Drain Line Safety Flange	76	-	Flange	0	0	0	0	0	0
77	13-06-2025	LV2002 CV Gland	77	-	Valve	0	0	0	0	0	0
78	13-06-2025	Discharge Line I/V Gland	78	-	Valve	0	0	0	0	0	0
79	13-06-2025	Discharge Line Drain Line I/V Gland	79	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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80	13-06-2025	Drain Line Safety Flange	80	-	Flange	0	0	0	0	0	0
81	13-06-2025	LV1802 Suction Line I/V Gland	81	-	Valve	0	0	0	0	0	0
82	13-06-2025	LV1802 CV Gland	82	-	Valve	0	0	0	0	0	0
83	13-06-2025	Discharge Line I/V Gland	83	-	Valve	0	0	0	0	0	0
84	13-06-2025	Drain line I/V Gland	84	-	Valve	0	0	0	0	0	0
85	13-06-2025	Drain Line Safety Flange	85	-	Flange	0	0	0	0	0	0
86	13-06-2025	PV2401 Suction Line I/V U/S Flange	86	-	Flange	0	0	0	0	0	0
87	13-06-2025	I/V Gland	87	-	Valve	0	0	0	0	0	0
88	13-06-2025	I/V D/S Flange	88	-	Flange	0	0	0	0	0	0
89	13-06-2025	Drain line I/V Gland	89	-	Valve	0	0	0	0	0	0
90	13-06-2025	Drain Line Safety Flange	90	-	Flange	0	0	0	0	0	0
91	13-06-2025	PV2401 Suction Line I/V U/S Flange	91	-	Flange	0	0	0	0	0	0
92	13-06-2025	PV2401 CV Gland	92	-	Valve	0	0	0	0	0	0
93	13-06-2025	CV D/S Flange	93	-	Valve	0	0	0	0	0	0
94	13-06-2025	Discharge line I/V U/S Flange	94	-	Flange	0	0	0	0	0	0
95	13-06-2025	I/V Gland	95	-	Valve	0	0	0	0	0	0
96	13-06-2025	I/V D/S Flange	96	-	Flange	0	0	0	0	0	0
97	13-06-2025	Drain line I/V Gland	97	-	Valve	0	0	0	0	0	0
98	13-06-2025	Drain Line Safety Flange	98	-	Flange	0	0	0	0	0	0
99	13-06-2025	NRV U/S Flange	99	-	Flange	0	0	0	0	0	0
100	13-06-2025	NRV D/S Flange	100	-	Flange	0	0	0	0	0	0
101	13-06-2025	Meter Line 1st I/V Gland	101	-	Valve	0	0	0	0	0	0
102	13-06-2025	Meter Line 2nd I/V Gland	102	-	Valve	0	0	0	0	0	0
103	13-06-2025	LV1702 Suction Line I/V Gland	103	-	Valve	0	0	0	0	0	0
104	13-06-2025	Drain line I/V Gland	104	-	Valve	0	0	0	0	0	0
105	13-06-2025	Drain Line Safety Flange	105	-	Flange	0	0	0	0	0	0
106	13-06-2025	LV1702 CV Gland	106	-	Valve	0	0	0	0	0	0
107	13-06-2025	CV D/S Flange	107	-	Flange	0	0	0	0	0	0
108	13-06-2025	Discharge line I/V Gland	108	-	Valve	0	0	0	0	0	0
109	13-06-2025	Discharge line Flange	109	-	Flange	0	0	0	0	0	0
110	13-06-2025	Drain line I/V Gland	110	-	Valve	0	0	0	0	0	0
111	13-06-2025	Drain Line Safety Flange	111	-	Flange	0	0	0	0	0	0
112	13-06-2025	LV1602 Suction Line I/V Gland	112	-	Valve	0	0	0	0	0	0
113	13-06-2025	Drain line I/V Gland	113	-	Valve	0	0	0	0	0	0
114	13-06-2025	Drain Line Safety Flange	114	-	Flange	0	0	0	0	0	0
115	13-06-2025	LV1602 CV Gland	115	-	Valve	0	0	0	0	0	0
116	13-06-2025	CV D/S Flange	116	-	Flange	0	0	0	0	0	0
117	13-06-2025	Discharge line I/V Gland	117	-	Valve	0	0	0	0	0	0
118	13-06-2025	Discharge line Drain Line I/V Gland	118	-	Valve	0	0	0	0	0	0
119	13-06-2025	Drain Line Safety Flange	119	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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120	13-06-2025	18PA114A Suction Line I/V U/S Flange	120	-	Flange	0	0	0	0	0	0
121	13-06-2025	I/V Gland	121	-	Valve	0	0	0	0	0	0
122	13-06-2025	I/V D/S Flange	122	-	Flange	0	0	0	0	0	0
123	13-06-2025	Discharge line I/V U/S Flange	123	-	Flange	0	0	0	0	0	0
124	13-06-2025	I/V Gland	124	-	Valve	0	0	0	0	0	0
125	13-06-2025	I/V D/S Flange	125	-	Flange	0	0	0	0	0	0
126	13-06-2025	NRV U/S Flange	126	-	Flange	0	0	0	0	0	0
127	13-06-2025	NRV D/S Flange	127	-	Flange	0	0	0	0	0	0
128	13-06-2025	Pump Seal	128	-	Valve	0	0	0	0	0	0
129	13-06-2025	Meter Line 1st I/V Gland	129	-	Valve	0	0	0	0	0	0
130	13-06-2025	Meter Line 2nd I/V Gland	130	-	Valve	0	0	0	0	0	0
131	13-06-2025	18PA114B Suction Line I/V U/S Flange	131	-	Flange	0	0	0	0	0	0
132	13-06-2025	I/V Gland	132	-	Valve	0	0	0	0	0	0
133	13-06-2025	I/V D/S Flange	133	-	Flange	0	0	0	0	0	0
134	13-06-2025	Discharge line I/V U/S Flange	134	-	Flange	0	0	0	0	0	0
135	13-06-2025	I/V Gland	135	-	Valve	0	0	0	0	0	0
136	13-06-2025	I/V D/S Flange	136	-	Flange	0	0	0	0	0	0
137	13-06-2025	NRV U/S Flange	137	-	Flange	0	0	0	0	0	0
138	13-06-2025	NRV D/S Flange	138	-	Flange	0	0	0	0	0	0
139	13-06-2025	Pump Seal	139	-	Valve	0	0	0	0	0	0
140	13-06-2025	Meter Line 1st I/V Gland	140	-	Valve	0	0	0	0	0	0
141	13-06-2025	Meter Line 2nd I/V Gland	141	-	Valve	0	0	0	0	0	0
142	13-06-2025	18PA104A Suction Line I/V U/S Flange	142	-	Flange	0	0	0	0	0	0
143	13-06-2025	I/V Gland	143	-	Valve	0	0	0	0	0	0
144	13-06-2025	I/V D/S Flange	144	-	Flange	0	0	0	0	0	0
145	13-06-2025	Drain line I/V Gland	145	-	Valve	0	0	0	0	0	0
146	13-06-2025	Drain Line Safety Flange	146	-	Flange	0	0	0	0	0	0
147	13-06-2025	Discharge line I/V U/S Flange	147	-	Flange	0	0	0	0	0	0
148	13-06-2025	I/V Gland	148	-	Valve	0	0	0	0	0	0
149	13-06-2025	I/V D/S Flange	149	-	Flange	0	0	0	0	0	0
150	13-06-2025	Pump Seal	150	-	Valve	0	0	0	0	0	0
151	13-06-2025	Meter Line 1st I/V Gland	151	-	Valve	0	0	0	0	0	0
152	13-06-2025	Meter Line 2nd I/V Gland	152	-	Valve	0	0	0	0	0	0
153	13-06-2025	18PA104B Suction Line I/V U/S Flange	153	-	Flange	0	0	0	0	0	0
154	13-06-2025	I/V Gland	154	-	Valve	0	0	0	0	0	0
155	13-06-2025	I/V D/S Flange	155	-	Flange	0	0	0	0	0	0
156	13-06-2025	Drain line I/V Gland	156	-	Valve	0	0	0	0	0	0
157	13-06-2025	Drain Line Safety Flange	157	-	Flange	0	0	0	0	0	0
158	13-06-2025	Discharge line I/V U/S Flange	158	-	Flange	0	0	0	0	0	0
159	13-06-2025	I/V Gland	159	-	Valve	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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160	13-06-2025	I/V D/S Flange	160	-	Flange	0	0	0	0	0	0
161	13-06-2025	Pump Seal	161	-	Valve	0	0	0	0	0	0
162	13-06-2025	Meter Line 1st I/V Gland	162	-	Valve	0	0	0	0	0	0
163	13-06-2025	Meter Line 2nd I/V Gland	163	-	Valve	0	0	0	0	0	0
164	13-06-2025	18PA104C Suction Line I/V U/S Flange	164	-	Flange	0	0	0	0	0	0
165	13-06-2025	I/V Gland	165	-	Valve	0	0	0	0	0	0
166	13-06-2025	I/V D/S Flange	166	-	Flange	0	0	0	0	0	0
167	13-06-2025	Drain line I/V Gland	167	-	Valve	0	0	0	0	0	0
168	13-06-2025	Drain Line Safety Flange	168	-	Flange	0	0	0	0	0	0
169	13-06-2025	Discharge line I/V U/S Flange	169	-	Flange	0	0	0	0	0	0
170	13-06-2025	I/V Gland	170	-	Valve	0	0	0	0	0	0
171	13-06-2025	I/V D/S Flange	171	-	Flange	0	0	0	0	0	0
172	13-06-2025	Pump Seal	172	-	Valve	0	0	0	0	0	0
173	13-06-2025	Meter Line 1st I/V Gland	173	-	Valve	0	0	0	0	0	0
174	13-06-2025	Meter Line 2nd I/V Gland	174	-	Valve	0	0	0	0	0	0
175	13-06-2025	18PA104D Suction Line I/V U/S Flange	175	-	Flange	0	0	0	0	0	0
176	13-06-2025	I/V Gland	176	-	Valve	0	0	0	0	0	0
177	13-06-2025	I/V D/S Flange	177	-	Flange	0	0	0	0	0	0
178	13-06-2025	Drain line I/V Gland	178	-	Valve	0	0	0	0	0	0
179	13-06-2025	Drain Line Safety Flange	179	-	Flange	0	0	0	0	0	0
180	13-06-2025	Discharge line I/V U/S Flange	180	-	Flange	0	0	0	0	0	0
181	13-06-2025	I/V Gland	181	-	Valve	0	0	0	0	0	0
182	13-06-2025	I/V D/S Flange	182	-	Flange	0	0	0	0	0	0
183	13-06-2025	Pump Seal	183	-	Valve	0	0	0	0	0	0
184	13-06-2025	Meter Line 1st I/V Gland	184	-	Valve	0	0	0	0	0	0
185	13-06-2025	Meter Line 2nd I/V Gland	185	-	Valve	0	0	0	0	0	0
186	13-06-2025	18PA104E Suction Line I/V U/S Flange	186	-	Flange	0	0	0	0	0	0
187	13-06-2025	I/V Gland	187	-	Valve	0	0	0	0	0	0
188	13-06-2025	I/V D/S Flange	188	-	Flange	0	0	0	0	0	0
189	13-06-2025	Drain line I/V Gland	189	-	Valve	0	0	0	0	0	0
190	13-06-2025	Drain Line Safety Flange	190	-	Flange	0	0	0	0	0	0
191	13-06-2025	Discharge line I/V U/S Flange	191	-	Flange	0	0	0	0	0	0
192	13-06-2025	I/V Gland	192	-	Valve	0	0	0	0	0	0
193	13-06-2025	I/V D/S Flange	193	-	Flange	0	0	0	0	0	0
194	13-06-2025	Pump Seal	194	-	Valve	0	0	0	0	0	0
195	13-06-2025	Meter Line 1st I/V Gland	195	-	Valve	0	0	0	0	0	0
196	13-06-2025	Meter Line 2nd I/V Gland	196	-	Valve	0	0	0	0	0	0
197	13-06-2025	18PA104F Suction Line I/V U/S Flange	197	-	Flange	0	0	0	0	0	0
198	13-06-2025	I/V Gland	198	-	Valve	0	0	0	0	0	0
199	13-06-2025	I/V D/S Flange	199	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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200	13-06-2025	Drain line I/V Gland	200	-	Valve	0	0	0	0	0	0
201	13-06-2025	Drain Line Safety Flange	201	-	Flange	0	0	0	0	0	0
202	13-06-2025	Discharge line I/V U/S Flange	202	-	Flange	0	0	0	0	0	0
203	13-06-2025	I/V Gland	203	-	Valve	0	0	0	0	0	0
204	13-06-2025	I/V D/S Flange	204	-	Flange	0	0	0	0	0	0
205	13-06-2025	Pump Seal	205	-	Valve	0	0	0	0	0	0
206	13-06-2025	Meter Line 1st I/V Gland	206	-	Valve	0	0	0	0	0	0
207	13-06-2025	Meter Line 2nd I/V Gland	207	-	Valve	0	0	0	0	0	0
208	13-06-2025	Level Indicator connecting Point	208	-	Valve	0	0	0	0	0	0
209	13-06-2025	US line IV Gland	209	-	Valve	0	0	0	0	0	0
210	13-06-2025	US line IV Flange	210	-	Flange	0	0	0	0	0	0
211	13-06-2025	Drain line IV Gland	211	-	Valve	0	0	0	0	0	0
212	13-06-2025	Drain line Safety Flange	212	-	Flange	0	0	0	0	0	0
213	13-06-2025	D/S line IV Gland	213	-	Valve	0	0	0	0	0	0
214	13-06-2025	D/S line IV Flange	214	-	Flange	0	0	0	0	0	0
215	13-06-2025	Meter line IV Gland	215	-	Valve	0	0	0	0	0	0
216	13-06-2025	Level Indicator connecting Point	216	-	Valve	0	0	0	0	0	0
217	13-06-2025	US line IV Gland	217	-	Valve	0	0	0	0	0	0
218	13-06-2025	US line IV Flange	218	-	Flange	0	0	0	0	0	0
219	13-06-2025	Drain line IV Gland	219	-	Valve	0	0	0	0	0	0
220	13-06-2025	Drain line Safety Flange	220	-	Flange	0	0	0	0	0	0
221	13-06-2025	D/S line IV Gland	221	-	Valve	0	0	0	0	0	0
222	13-06-2025	D/S line IV Flange	222	-	Flange	0	0	0	0	0	0
223	13-06-2025	Meter line IV Gland	223	-	Valve	0	0	0	0	0	0
224	13-06-2025	Level Indicator connecting Point	224	-	Valve	0	0	0	0	0	0
225	13-06-2025	US line IV Gland	225	-	Valve	0	0	0	0	0	0
226	13-06-2025	US line IV Flange	226	-	Flange	0	0	0	0	0	0
227	13-06-2025	Drain line IV Gland	227	-	Valve	0	0	0	0	0	0
228	13-06-2025	Drain line Safety Flange	228	-	Flange	0	0	0	0	0	0
229	13-06-2025	D/S line IV Gland	229	-	Valve	0	0	0	0	0	0
230	13-06-2025	D/S line IV Flange	230	-	Flange	0	0	0	0	0	0
231	13-06-2025	US line IV Flange	231	-	Flange	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-009-A-SERVICE NAPHTHA MS											
1	17-06-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	17-06-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	17-06-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	17-06-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	17-06-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	17-06-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	17-06-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	17-06-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	17-06-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	17-06-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	17-06-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	17-06-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	17-06-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	17-06-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	17-06-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	17-06-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	17-06-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	17-06-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	17-06-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	17-06-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	17-06-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	17-06-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	17-06-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	17-06-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	17-06-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	17-06-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	17-06-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	17-06-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	17-06-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	17-06-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	17-06-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	17-06-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	17-06-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	17-06-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	17-06-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	17-06-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	17-06-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	17-06-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	17-06-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	17-06-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	17-06-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	17-06-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	17-06-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	17-06-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	17-06-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	17-06-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	17-06-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	17-06-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	17-06-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	17-06-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	17-06-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	17-06-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	17-06-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	17-06-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	17-06-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	17-06-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	17-06-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	17-06-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	17-06-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	17-06-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	17-06-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	17-06-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	17-06-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	17-06-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	17-06-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-009-C-SERVICE NAPHTHA MS											
1	17-06-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	17-06-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	17-06-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	17-06-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	17-06-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	17-06-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	17-06-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	17-06-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	17-06-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	17-06-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	17-06-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	17-06-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	17-06-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	17-06-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	17-06-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	17-06-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	17-06-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	17-06-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	17-06-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	17-06-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	17-06-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	17-06-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	17-06-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	17-06-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	17-06-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	17-06-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	17-06-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	17-06-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	17-06-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	17-06-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	17-06-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	17-06-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	17-06-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	17-06-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	17-06-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	17-06-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	17-06-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	17-06-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	17-06-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	17-06-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	17-06-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	17-06-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	17-06-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	17-06-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	17-06-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	17-06-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	17-06-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	17-06-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	17-06-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	17-06-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	17-06-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	17-06-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	17-06-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	17-06-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	17-06-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	17-06-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	17-06-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	17-06-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	17-06-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	17-06-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	17-06-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	17-06-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	17-06-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	17-06-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	17-06-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-009-D-SERVICE NAPHTHA MS											
1	17-06-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	17-06-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	17-06-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	17-06-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	17-06-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	17-06-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	17-06-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	17-06-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	17-06-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	17-06-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	17-06-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	17-06-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	17-06-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	17-06-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	17-06-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	17-06-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	17-06-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	17-06-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	17-06-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	17-06-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	17-06-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	17-06-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	17-06-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	17-06-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	17-06-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	17-06-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	17-06-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	17-06-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	17-06-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	17-06-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	17-06-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	17-06-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	17-06-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	17-06-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	17-06-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	17-06-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	17-06-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	17-06-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	17-06-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	17-06-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	17-06-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	17-06-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	17-06-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	17-06-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	17-06-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	17-06-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	17-06-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	17-06-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	17-06-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	17-06-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	17-06-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	17-06-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	17-06-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	17-06-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	17-06-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	17-06-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	17-06-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	17-06-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	17-06-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	17-06-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	17-06-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	17-06-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	17-06-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	17-06-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	17-06-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-001-A SERVICE MTBE											
1	17-06-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	17-06-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	17-06-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	17-06-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	17-06-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	17-06-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	17-06-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	17-06-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	17-06-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	17-06-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	17-06-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	17-06-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	17-06-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	17-06-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	17-06-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	17-06-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	17-06-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	17-06-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	17-06-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	17-06-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	17-06-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	17-06-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	17-06-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	17-06-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	17-06-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	17-06-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	17-06-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	17-06-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	17-06-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	17-06-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	17-06-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	17-06-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	17-06-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	17-06-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	17-06-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	17-06-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	17-06-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	17-06-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	17-06-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	17-06-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	17-06-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	17-06-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	17-06-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	17-06-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	17-06-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	17-06-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	17-06-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	17-06-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	17-06-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	17-06-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	17-06-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	17-06-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	17-06-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	17-06-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	17-06-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	17-06-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	17-06-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	17-06-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	17-06-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	17-06-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	17-06-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	17-06-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	17-06-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	17-06-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	17-06-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	17-06-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	17-06-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	17-06-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	17-06-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	17-06-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-001-B SERVICE OB											
1	17-06-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	17-06-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	17-06-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	17-06-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	17-06-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	17-06-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	17-06-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	17-06-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	17-06-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	17-06-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	17-06-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	17-06-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	17-06-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	17-06-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	17-06-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	17-06-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	17-06-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	17-06-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	17-06-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	17-06-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	17-06-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	17-06-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	17-06-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	17-06-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	17-06-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	17-06-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	17-06-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	17-06-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	17-06-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	17-06-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	17-06-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	17-06-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	17-06-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	17-06-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	17-06-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	17-06-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	17-06-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	17-06-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	17-06-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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40	17-06-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	17-06-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	17-06-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	17-06-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	17-06-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	17-06-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	17-06-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	17-06-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	17-06-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	17-06-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	17-06-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	17-06-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	17-06-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	17-06-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	17-06-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	17-06-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	17-06-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	17-06-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	17-06-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	17-06-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	17-06-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	17-06-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	17-06-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	17-06-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	17-06-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	17-06-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	17-06-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	17-06-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	17-06-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	17-06-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	17-06-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-004-A-SERVICE : MS											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-004-B-SERVICE : MS											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-45-TT-FR-004-C-SERVICE : MS											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO.45-TT-FR-005-A-SERVICE -HSD											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO.45-TT-FR-005-B-SERVICE -HSD											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO.45-TT-FR-005-C-SERVICE -HSD											
1	01-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	01-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	01-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	01-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	01-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	01-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	01-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	01-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	01-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	01-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	01-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	01-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	01-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	01-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	01-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	01-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	01-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	01-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	01-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	01-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	01-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	01-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	01-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	01-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	01-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	01-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	01-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	01-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	01-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	01-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	01-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	01-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	01-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	01-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	01-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	01-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	01-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0
38	01-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	01-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	01-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	01-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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42	01-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	01-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	01-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	01-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	01-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	01-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	01-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	01-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	01-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	01-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	01-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	01-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	01-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	01-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	01-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	01-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	01-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	01-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	01-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	01-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	01-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	01-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	01-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	01-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	01-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	01-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	01-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	01-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	01-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	01-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	01-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	01-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	01-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	01-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0
76	01-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	01-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	01-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	01-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	01-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	01-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	01-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	01-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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84	01-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	01-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	01-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	01-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	01-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	01-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	01-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	01-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	01-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	01-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	01-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	01-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	01-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	01-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	01-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	01-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	01-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	01-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	01-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	01-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	01-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	01-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	01-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	01-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	01-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	01-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	01-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	01-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	01-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	01-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0
114	01-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	01-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	01-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	01-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	01-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	01-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	01-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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Numaligarh Refinery Limited

(A Govt. of India Enterprises)

NRL Complex, Numaligarh, Distt. Golaghat, Assam, 785 699

Reports on Fugitive Emission Management (Leak Detection & Repair)



Study Period: July 2025

Prepared By



NITYA LABORATORIES

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LDAR (Fugitive Emission) Survey Report for Numaligarh Refinery Limited

Name of Client : M/s Numaligarh Refinery Limited

NRL Complex, Numaligarh,
Distt. Golaghat, Assam, 785 699, India

Name of Vendor : M/s Nitya Laboratories

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Nature of Job : Fugitive Emission Survey Report at Numaligarh Refinery Limited, NRL
Complex, Numaligarh, Distt. Golaghat, Assam, 785 699, India

Report Period : July 2025

FOR NITYA LABORATORIES

RAVINDER MITTAL

Head-Environmental Division

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Executive Summary

M/s Numaligarh Refinery Limited has intended to conduct the Fugitive Emission survey/Leak Detection and Repair (LDAR) program at its refinery Numaligarh, Assam. As a part of this program M/s Numaligarh Refinery Limited has awarded the contract to M/s Nitya Laboratories for conducting the LDAR survey for the period to 04/2025.

The LDAR Program at site included the detection, tagging and measurement of VOC emission from these identified points which included valves, pump seal, compressor & pressure relieve valves for the measurement of the period July 2025.

Plant Wise Summary of VOC

Sr. No.	Date of Monitoring	Unit	Total No's of Points Monitored	Total No's of Leakage	Total Leak (kg/hr)	Total Leak (kg/day)
1	16-07-2025	TANK NO-44-TT-FR-101-A-SERVICE CRUDE	150	0	0	0
2	16-07-2025	TANK NO-44-TT-FR-101-B-SERVICE CRUDE	150	0	0	0
3	16-07-2025	TANK NO-44-TT-FR-101-C-SERVICE CRUDE	150	0	0	0
4	16-07-2025	TANK NO-44-TT-FR-101-D-SERVICE CRUDE	150	0	0	0
5	18-07-2025	TANK NO-44-TT-FR-102-A-SERVICE S.R NAPHTHA	80	0	0	0
6	18-07-2025	TANK NO-44-TT-FR-102-C-SERVICE HCU NAPHTHA	80	0	0	0
7	18-07-2025	TANK NO-44-TT-FR-117 (A) SERVICE-ISOMERATE REFORMAT	55	0	0	0
8	18-07-2025	TANK NO-44-TT-FR-117 (B) SERVICE-ISOMERATE REFORMAT	55	0	0	0
9	21-07-2025	TANK NO-44-TT-FR-104-A-SERVICE HSD	99	0	0	0
10	21-07-2025	TANK NO-44-TT-FR-104-B-SERVICE SLOP	99	0	0	0
11	21-07-2025	TANK NO-44-TT-FR-104-C-SERVICE HSD	99	0	0	0
12	21-07-2025	TANK NO-44-TT-FR-105-C-SERVICE HSD	100	0	0	0
13	25-07-2025	TANK NO-41-TT-FR-114-A-SERVICE SLOPS (DRY)	40	0	0	0
14	25-07-2025	TANK NO-41-TT-FR-114-B-SERVICE SLOPS (DRY)	40	0	0	0
15	25-07-2025	TANK NO-41-TT-FR-114-C-SERVICE SLOPS (DRY)	40	0	0	0
16	25-07-2025	TANK NO-41-TT-FR-121-A-SERVICE DHDT FEED	50	0	0	0
17	25-07-2025	TANK NO-41-TT-FR-121-B-SERVICE DHDT FEED	50	0	0	0
Total			1487	0	0	0

Confirmatory Statement: The monitored values are within the limits as per CPCB Guidelin

1.0 INTRODUCTION

The petroleum refinery industry has successfully reduced its emissions of non-methane volatile organic compounds (NMVOC), one of the precursors to surface level ozone formation, by focusing on reduced venting, vapour recovery and better storage controls. In order make further reductions, the industry is now focusing its efforts on the control of fugitive emissions (leaks)¹ which can contribute up to one third of the remaining site NMVOC emissions. Fugitive emissions are generated at plant components which are supposed to be leak-tight (like pump or compressor seals, valve packing, flanges, sample points, etc.). Whilst a typical site would have 50,000+ such components, only a few of these contribute to the bulk of fugitive emissions. Identifying these few leaks for repair is difficult and time consuming, as they are spread out over the entire site, including hard to access locations.

Methodologies are currently available to detect leaking equipment in so-called LDAR (Leak Detection and Repair) programs:

Method 21 uses a hydrocarbon ionisation detector; this methodology was developed by the US-EPA and was the first historically. It is a widely accepted method, key elements of which are adopted in the European Standard EN 15446:2008.

A fugitive emission monitoring project is typically conducted in following phases:

2.0 About LDAR: Leak Detection and Repair (LDAR) is a program implemented to comply with environmental regulations for reducing the fugitive emissions of targeted chemicals into the environment. Several standards such as *Maximum Achievable Control Technology* (MACT) standards, *New Source Performance Standards* (NSPS), *National Emissions Standards for Hazardous Air Pollutants* (NESHAP) and Central Pollution Control Board (CPCB) require the monitoring and reporting of these fugitive emissions from process equipment.

Process components of about 10000 points are monitored as LDAR and cover all the components in the process plant.

A typical chemical unit can emit some tons per year of VOCs from leaking equipment, such as valves, connectors, pumps, sampling connections, compressors, pressure relief devices and open-ended lines.

The environmental regulations are prescribed LDAR programs as a means of reducing emissions have very specific standards and applied to a monitoring and repair program. The LDAR study included the following protocols:

- Chemical streams that must be monitored
- Types of components (pumps, valves, connectors, etc.) to be monitored
- Measured concentration in PPM that indicates a leak
- Frequency of monitoring
- Method of monitoring
- Actions to be taken if a leak is discovered
- Length of time in which an initial attempt to repair the leak must be performed
- Length of time in which an effective repair of the leak must be made
- Actions that must be taken if a leak cannot be repaired within guidelines
- Record-keeping and reporting requirements

VOCs are contributed to the formation of ground level ozone. Many of the areas where Refineries are located do not meet the NAAQ standards for ozone. Ozone can be transported in the atmosphere and contribute to nonattainment in downwind areas.

Affected Sources: Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, flange and connector that contains or contacts a fluid or gas. that is exceeding more than 5000ppm of pump and compressor seals and 3000 ppm other components is an affected source.

Equipment Leak: A leak is defined as greater than or equal to 3,000 & 5000 ppmv as methane, for organic compounds, as determined by EPA Reference Method 21. Most of the emissions are from valves and connectors because these are most prevalent components and can number in the thousands. The major cause of emissions from valves and connectors is seal or gasket failure due to normal wear or improper maintenance. More than 90% of emissions from the leaking equipment with valves are being the most significant source. The open-ended lines and sampling connections account for as much as 5 – 10% of total VOC emissions from equipment leaks.

Minimum Requirements for an Acceptable Organic LDAR Program:

- Each affected source is screened initially using Method 21. Sources that are unsafe to monitor is not screened, but documentation is provided to substantiate the unsafe nature.
- Monthly visual inspections has to be performed by industry on each affected source for signs of leakage (e.g. dripping liquid, spraying, misting, clouding, ice formation, distinctive odors, etc.).
- Monitoring of each affected source is to be conducting quarterly using Method 21.

All potential leak points associated with a component must be identified and screened for leaks. The detected leaks by Method 21 test was tagged and repaired. The leak sources are measured after repair and the same is recorded.

3.0 METHODOLOGY OF THE STUDY:

Step 1: Preparation of LDAR project

- Information exchange meeting
- Project introduction
- Project scoping
- Coding & naming conventions
- Prepare technical information (medium, stream, drawings, ...)
- Stream composition
- YTD production time per stream
- Leak definition, repair definition and tag definition per stream
- Detection equipment to use

Step 2: Database preparation:

- Build site structure (unit - sections - drawings - streams)
- Prepare Basic data
- Prepare Customer data

Step 3: Source inventory:

- Project kick-off meeting
- Safety training
- Site visit
- Define monitoring routes
- Start inventory program
- Prepare monitoring phase

Step 4: Unit monitoring phase

- Prepare detection devices and gather relevant information
- Start monitoring program
- Regular status meetings
- Database update

Step 5: First repair attempt

- Prepare tightening lists (sources with leak-rate > repair definition)
- Guide mechanical/operator to leaking sources
- Perform on-line reparation
- Re-monitoring after repair attempt

Step 6: Reporting

- Consolidate all gathered data
- Prepare lessons learned
- Create LDAR report
- Detail list of all leaking sources
- Repair orders
- Equipment overview per EPA source
- Top leakers (in costs and losses)

- Sort on most leaking equipment (EPA sources)

Sampling Methodology:

Initial Screening: Screening tests must be conducted initially and include:

1. The type of affected source (e.g. pump, compressor, etc.).
2. Site specific ID of each affected source.
3. Date of the Method 21 test.
4. Type of Method 21 detector.
5. Calibration results of Method 21 detector.
6. Screening results in ppmv.

4.0 Volatile Organic Compounds (VOCs)

4.1. VOC Definition

To this study the term VOC is defined as “all products of which at least 20% m/m has a vapour pressure higher than 0.3 kPa at 20°C. For the petroleum industry this includes all light products and excludes kerosene and all higher (i.e., heavier) products”.

The streams concerned in these studies do not contain methane so strictly the study addresses non-methane volatile hydrocarbons (NMVOC).

4.1.1. Diffuse VOC Emissions

Diffuse VOC emission is defined by the Best Available Technique Reference Document for the Refining of Mineral Oil and Gas (REF BREF) to be:

“Non-channelled VOC emissions that are not released via specific emission points such as stacks. They can result from 'area' sources (e.g., tanks) or 'point' sources (e.g., pipe flanges)”

“Diffuse VOC emissions are emissions arising from direct contact of gaseous or liquid volatile organic compounds with the environment (atmosphere, under normal operating circumstances). These can result from:

- Inherent design of the equipment (e.g., uncovered oil/water separators);
- Operating conditions (e.g., non collected vent of a fixed roof tank during loading); or fugitive emission caused by an undesired gradual loss of tightness from a piece of equipment and a resulting leak. Fugitive emissions are a subset of diffuse emission.”

The focus of this report is on comparing two detection methods for fugitive emissions from point sources which typically make up between 20-50% of the overall refinery diffuse emissions. Emissions from point sources include leaks from components which are not fully sealed: pipe flanges, valve stems, pump and compressor seals, etc.

5.0 Leak Detection and Quantification Methods

5.1 Leak Detection and Leak Quantification

When discussing the monitoring and reporting of VOC emissions, three different purposes have to be taken into account: leak detection, identification and quantification. For the point sources considered in this report detection and identification are synonymous.

- ❖ Leak detection/identification: VOC instruments can be used for the VOC leak detection: e.g. flame ionisation detector. The number of leaks and a leak indication (e.g., measured concentration (screening value) are recorded.
- ❖ Leak quantification is the estimate of the number of VOCs emitted (i.e., t/a) for reporting and tracking purposes.

Leak Detection and Repair (LDAR) programmes have been put in place across Indian/European refineries in order to detect and reduce the VOC fugitive emissions. Although the main purpose of an LDAR program is to decrease VOC emission, leak quantification was added for reporting purposes and for tracking the long term progress.

5.2 Leak Detection Methods

Methodology is currently available to detect the emissions from leaking equipment:

Methodologies Based on Sniffing: the detection is done by drawing an air sample past a hydrocarbon ionisation detector to detect the VOC concentration in the vicinity of the leak source (called screening value). This methodology was first developed by the US Environmental Protection Agency (EPA) and is referred to as “Method 21”.

The European LDAR Standard EN 15446:2008 is a modified version of Method 21 where the frequency of the surveys and the leak repair threshold are not fixed but can be adapted based on analysis of the previous survey.

5.2.1 Sniffing Detection Instruments

Many different types of Sniffing analysers can be used to detect fugitive VOC emissions. The most common types are photo-ionization detectors (PID).

5.2.2 Photo-Ionisation Detectors

Ionization detectors operate by ionizing the gas sample and then measuring the charge (number of ions) produced. PIDs use ultraviolet light. The response of a PID can vary significantly with double bonded compounds. Therefore the PID is most commonly used in refinery LDAR surveys. PID analysers have to be calibrated for a hydrocarbon concentration of 100 PPM.

The Nitya Laboratories using the Honeywell International PV Make and model no. Mini RAE 3000⁺ having the range between 0.1 PPM to 15000 PPM.

5.3 Leak Quantification/Estimation Methods

Leak Emission Estimation Based on the Sniffing Techniques

The Sniffing technique involves placing a detecting instrument probe close to the surface of a piece of process equipment where there is the potential for a leak (e.g., at flange seal). The VOC concentration of the leak is

measured by moving the probe along the surface. The maximum instrument reading in ppm is recorded. This is referred to as the “screening value”. A record is also made of the type of equipment device (valve, flange, pump seal etc.). A leak is considered to occur when the screening value measured is above a given concentration (e.g., 15,000 ppmv). The leak definition criterion can vary from one site to another and is usually set in the environmental permit. Above that given concentration threshold, the equipment is identified as leaking and must be repaired. Components which give screening values below the leak definition are considered as non-leakers and repairs are not required.

This detection method requires every potential leaking point included in the database (a listing of all sources) to be surveyed and therefore this procedure is very expensive and labour-intensive.

The equipment to be monitored by Sniffing is listed in a database and is restricted to:

- ❖ Accessible points (e.g., not under insulation, able to be reached without scaffolding).
- ❖ The lines containing a light hydrocarbon (20% of the fluid m/m has a vapour pressure higher than 0.3 kPa at 20°C).

Standards for Equipment Leaks

- (1) Approach: Approach for controlling fugitive emissions from equipment leaks shall have proper selection, installation and maintenance of non-leaking or leak-tight equipment. Following initial testing after commissioning, the monitoring for leak detection is to be carried out as a permanent on-going Leak Detection and Repair (LDAR) programme. Finally detected leaks are to be repaired within an allowable timeframe.
- (2) Components to be Covered: Components that shall be covered under LDAR programme include (i) Block valves; (ii) Control valves; (iii) Pump seals; (iv) Compressor seals; (v) Pressure relief valves; (vi) Flanges – Heat Exchangers; (vii) Flanges – Piping; (viii) Connectors – Piping; (ix) Open ended lines; and (x) Sampling connections, Equipment and line sizes more than 1.875 cm or ¾ inch are to be covered.
- (3) Applicability: LDAR programme would be applicable to components (given at 2 above) for following products/compounds: (i) hydrocarbon gases; (ii) Light liquid with vapour pressure @ 20°C > 1.0 kPa; and (iii) Heavy liquid with vapour pressure @ 20° C between 0.3 to 1.0 kPa.
- (4) While LDAR will not be applicable for heavy liquids with vapour pressure < 0.3 kPa, it will be desirable to check for liquid dripping as indication of leak.
- (5) Definition of leak: A leak is defined as the detection of VOC concentration more than the values (in ppm) specified below at the emission source using a hydrocarbon analyzer according to measurement protocol (US EPA – 453/R-95-017, 1995 Protocol for equipment leak emission estimates may be referred to:

Component	General Hydrocarbon (ppm)		Benzene (ppm)	
	Till 31 st Dec. 2008	w.e.f. January 01, 2009	Till 31 st Dec., 2008	w.e.f January 01, 2009
Pump/Compressor	10000	5000	3000	2000
Valves/Flanges	10000	3000	2000	1000
Other components	10000	3000	2000	1000

- (6) In addition, any component observed to be leaking by sight, sound, or smell, regardless of concentration (liquid dripping, visible vapor leak) or presence of bubbles using soap solution should be considered as leak.
- (7) Monitoring Requirements and Repair Schedule: Following frequency of monitoring of leaks and schedule for repair of leaks shall be followed:
- (8) The percentage leaking components should not be more than 2% for any group of components monitored excluding pumps/compressors. In the case of pumps/compressors it should be less than 10% of the total number of pumps/compressors or three pumps and compressors, whichever is greater.
- (9) Emission inventory: Refinery shall prepare an inventory of equipment components in the plant. After the instrumental measurement of leaks, emission from the components will be calculated using stratified emission factor (USEPA) or any other superior factors. The total fugitive emission will be established.

Component	Frequency of monitoring	Repair schedule
	Quarterly (semiannual after two consecutive periods with <2% leaks and annual after 5 periods with < 2% leaks)	Repair will be started within 5 working days and shall be completed within 15 working days after detection of leak for general hydrocarbons. In case of benzene, the leak shall be attended immediately for repair.
Pump seals	Quarterly	
Compressor seals	Quarterly	
Pressure relief devices	Quarterly	
Pressure relief devices (after venting)	Within 24 hours	
Heat Exchangers	Quarterly	
Process drains	Annually	
Components that are difficult to monitor	Annually	
Pump seals with visible liquid dripping	Immediately	Immediately
Any component with visible leaks	Immediately	Immediately
Any component after repair/ replacement	Within five days	-

- (10) Monitoring following types of monitoring methods may be judiciously employed for detection of leaks: (i) instrumental method of measurement of leaks; (ii) Audio, visual and olfactory (AVO) leak detection; and (iii) Soap bubble method.
- (11) Data on time of measurement and concentration value for leak detection; time of repair of leak; and time of measurement & concentration value after repair of leak should be documented for all the components.
- (12) Pressure relief and blow down systems should discharge to a vapour collection and recovery system or to flare.
- (13) Open-ended lines should be closed by a blind flange or plugged.
- (14) A totally closed loop should be used in all routine samples.
- (15) Low emission packing should be used for valves.
- (16) High integrity sealing materials should be used for flanges

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-101-A-SERVICE CRUDE											
1	16-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	16-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	16-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	16-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	16-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	16-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	16-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	16-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	16-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	16-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	16-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	16-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	16-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	16-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	16-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	16-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	16-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	16-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	16-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	16-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	16-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	16-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	16-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	16-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	16-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	16-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	16-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	16-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	16-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	16-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	16-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	16-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	16-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	16-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	16-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	16-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	16-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	16-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	16-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	16-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	16-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	16-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	16-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	16-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	16-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	16-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	16-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	16-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	16-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	16-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	16-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	16-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	16-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	16-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	16-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	16-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	16-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	16-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	16-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	16-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	16-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	16-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	16-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	16-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	16-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	16-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	16-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	16-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	16-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	16-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	16-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	16-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	16-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	16-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	16-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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76	16-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	16-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	16-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	16-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	16-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	16-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	16-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	16-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	16-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	16-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	16-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	16-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	16-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	16-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	16-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	16-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	16-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	16-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	16-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	16-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	16-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	16-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	16-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	16-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	16-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	16-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	16-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	16-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	16-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	16-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	16-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	16-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	16-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	16-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	16-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	16-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	16-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	16-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
114	16-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	16-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	16-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	16-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	16-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	16-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	16-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0
121	16-07-2025	Rim Seal Area Point No. 121	121	0	0	0	0	0	0	0	0
122	16-07-2025	Rim Seal Area Point No. 122	122	0	0	0	0	0	0	0	0
123	16-07-2025	Rim Seal Area Point No. 123	123	0	0	0	0	0	0	0	0
124	16-07-2025	Rim Seal Area Point No. 124	124	0	0	0	0	0	0	0	0
125	16-07-2025	Rim Seal Area Point No. 125	125	0	0	0	0	0	0	0	0
126	16-07-2025	Rim Seal Area Point No. 126	126	0	0	0	0	0	0	0	0
127	16-07-2025	Rim Seal Area Point No. 127	127	0	0	0	0	0	0	0	0
128	16-07-2025	Rim Seal Area Point No. 128	128	0	0	0	0	0	0	0	0
129	16-07-2025	Rim Seal Area Point No. 129	129	0	0	0	0	0	0	0	0
130	16-07-2025	Rim Seal Area Point No. 130	130	0	0	0	0	0	0	0	0
131	16-07-2025	Rim Seal Area Point No. 131	131	0	0	0	0	0	0	0	0
132	16-07-2025	Rim Seal Area Point No. 132	132	0	0	0	0	0	0	0	0
133	16-07-2025	Rim Seal Area Point No. 133	133	0	0	0	0	0	0	0	0
134	16-07-2025	Rim Seal Area Point No. 134	134	0	0	0	0	0	0	0	0
135	16-07-2025	Rim Seal Area Point No. 135	135	0	0	0	0	0	0	0	0
136	16-07-2025	Rim Seal Area Point No. 136	136	0	0	0	0	0	0	0	0
137	16-07-2025	Rim Seal Area Point No. 137	137	0	0	0	0	0	0	0	0
138	16-07-2025	Rim Seal Area Point No. 138	138	0	0	0	0	0	0	0	0
139	16-07-2025	Rim Seal Area Point No. 139	139	0	0	0	0	0	0	0	0
140	16-07-2025	Rim Seal Area Point No. 140	140	0	0	0	0	0	0	0	0
141	16-07-2025	Rim Seal Area Point No. 141	141	0	0	0	0	0	0	0	0
142	16-07-2025	Rim Seal Area Point No. 142	142	0	0	0	0	0	0	0	0
143	16-07-2025	Rim Seal Area Point No. 143	143	0	0	0	0	0	0	0	0
144	16-07-2025	Rim Seal Area Point No. 144	144	0	0	0	0	0	0	0	0
145	16-07-2025	Rim Seal Area Point No. 145	145	0	0	0	0	0	0	0	0
146	16-07-2025	Rim Seal Area Point No. 146	146	0	0	0	0	0	0	0	0
147	16-07-2025	Rim Seal Area Point No. 147	147	0	0	0	0	0	0	0	0
148	16-07-2025	Rim Seal Area Point No. 148	148	0	0	0	0	0	0	0	0
149	16-07-2025	Rim Seal Area Point No. 149	149	0	0	0	0	0	0	0	0
150	16-07-2025	Rim Seal Area Point No. 150	150	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-101-B-SERVICE CRUDE											
1	16-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	16-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	16-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	16-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	16-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	16-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	16-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	16-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	16-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	16-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	16-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	16-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	16-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	16-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	16-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	16-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	16-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	16-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	16-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	16-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	16-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	16-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	16-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	16-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	16-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	16-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	16-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	16-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	16-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	16-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	16-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	16-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	16-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	16-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	16-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	16-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	16-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	16-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	16-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	16-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	16-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	16-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	16-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	16-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	16-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	16-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	16-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	16-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	16-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	16-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	16-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	16-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	16-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	16-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	16-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	16-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	16-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	16-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	16-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	16-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	16-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	16-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	16-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	16-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	16-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	16-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	16-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	16-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	16-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	16-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	16-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	16-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	16-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	16-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	16-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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76	16-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	16-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	16-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	16-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	16-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	16-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	16-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	16-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	16-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	16-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	16-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	16-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	16-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	16-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	16-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	16-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	16-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	16-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	16-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	16-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	16-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	16-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	16-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	16-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	16-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	16-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	16-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	16-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	16-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	16-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	16-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	16-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	16-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	16-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	16-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	16-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	16-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	16-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
114	16-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	16-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	16-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	16-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	16-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	16-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	16-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0
121	16-07-2025	Rim Seal Area Point No. 121	121	0	0	0	0	0	0	0	0
122	16-07-2025	Rim Seal Area Point No. 122	122	0	0	0	0	0	0	0	0
123	16-07-2025	Rim Seal Area Point No. 123	123	0	0	0	0	0	0	0	0
124	16-07-2025	Rim Seal Area Point No. 124	124	0	0	0	0	0	0	0	0
125	16-07-2025	Rim Seal Area Point No. 125	125	0	0	0	0	0	0	0	0
126	16-07-2025	Rim Seal Area Point No. 126	126	0	0	0	0	0	0	0	0
127	16-07-2025	Rim Seal Area Point No. 127	127	0	0	0	0	0	0	0	0
128	16-07-2025	Rim Seal Area Point No. 128	128	0	0	0	0	0	0	0	0
129	16-07-2025	Rim Seal Area Point No. 129	129	0	0	0	0	0	0	0	0
130	16-07-2025	Rim Seal Area Point No. 130	130	0	0	0	0	0	0	0	0
131	16-07-2025	Rim Seal Area Point No. 131	131	0	0	0	0	0	0	0	0
132	16-07-2025	Rim Seal Area Point No. 132	132	0	0	0	0	0	0	0	0
133	16-07-2025	Rim Seal Area Point No. 133	133	0	0	0	0	0	0	0	0
134	16-07-2025	Rim Seal Area Point No. 134	134	0	0	0	0	0	0	0	0
135	16-07-2025	Rim Seal Area Point No. 135	135	0	0	0	0	0	0	0	0
136	16-07-2025	Rim Seal Area Point No. 136	136	0	0	0	0	0	0	0	0
137	16-07-2025	Rim Seal Area Point No. 137	137	0	0	0	0	0	0	0	0
138	16-07-2025	Rim Seal Area Point No. 138	138	0	0	0	0	0	0	0	0
139	16-07-2025	Rim Seal Area Point No. 139	139	0	0	0	0	0	0	0	0
140	16-07-2025	Rim Seal Area Point No. 140	140	0	0	0	0	0	0	0	0
141	16-07-2025	Rim Seal Area Point No. 141	141	0	0	0	0	0	0	0	0
142	16-07-2025	Rim Seal Area Point No. 142	142	0	0	0	0	0	0	0	0
143	16-07-2025	Rim Seal Area Point No. 143	143	0	0	0	0	0	0	0	0
144	16-07-2025	Rim Seal Area Point No. 144	144	0	0	0	0	0	0	0	0
145	16-07-2025	Rim Seal Area Point No. 145	145	0	0	0	0	0	0	0	0
146	16-07-2025	Rim Seal Area Point No. 146	146	0	0	0	0	0	0	0	0
147	16-07-2025	Rim Seal Area Point No. 147	147	0	0	0	0	0	0	0	0
148	16-07-2025	Rim Seal Area Point No. 148	148	0	0	0	0	0	0	0	0
149	16-07-2025	Rim Seal Area Point No. 149	149	0	0	0	0	0	0	0	0
150	16-07-2025	Rim Seal Area Point No. 150	150	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-101-C-SERVICE CRUDE											
1	16-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	16-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	16-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	16-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	16-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	16-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	16-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	16-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	16-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	16-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	16-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	16-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	16-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	16-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	16-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	16-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	16-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	16-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	16-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	16-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	16-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	16-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	16-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	16-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	16-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	16-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	16-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	16-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	16-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	16-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	16-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	16-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	16-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	16-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	16-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	16-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	16-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	16-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	16-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	16-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	16-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	16-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	16-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	16-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	16-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	16-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	16-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	16-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	16-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	16-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	16-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	16-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	16-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	16-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	16-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	16-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	16-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	16-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	16-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	16-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	16-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	16-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	16-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	16-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	16-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	16-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	16-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	16-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	16-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	16-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	16-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	16-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	16-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	16-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	16-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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76	16-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	16-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	16-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	16-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	16-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	16-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	16-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	16-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	16-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	16-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	16-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	16-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	16-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	16-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	16-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	16-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	16-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	16-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	16-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	16-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	16-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	16-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	16-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	16-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	16-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	16-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	16-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	16-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	16-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	16-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	16-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	16-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	16-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	16-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	16-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	16-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	16-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	16-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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114	16-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	16-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	16-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	16-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	16-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	16-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	16-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0
121	16-07-2025	Rim Seal Area Point No. 121	121	0	0	0	0	0	0	0	0
122	16-07-2025	Rim Seal Area Point No. 122	122	0	0	0	0	0	0	0	0
123	16-07-2025	Rim Seal Area Point No. 123	123	0	0	0	0	0	0	0	0
124	16-07-2025	Rim Seal Area Point No. 124	124	0	0	0	0	0	0	0	0
125	16-07-2025	Rim Seal Area Point No. 125	125	0	0	0	0	0	0	0	0
126	16-07-2025	Rim Seal Area Point No. 126	126	0	0	0	0	0	0	0	0
127	16-07-2025	Rim Seal Area Point No. 127	127	0	0	0	0	0	0	0	0
128	16-07-2025	Rim Seal Area Point No. 128	128	0	0	0	0	0	0	0	0
129	16-07-2025	Rim Seal Area Point No. 129	129	0	0	0	0	0	0	0	0
130	16-07-2025	Rim Seal Area Point No. 130	130	0	0	0	0	0	0	0	0
131	16-07-2025	Rim Seal Area Point No. 131	131	0	0	0	0	0	0	0	0
132	16-07-2025	Rim Seal Area Point No. 132	132	0	0	0	0	0	0	0	0
133	16-07-2025	Rim Seal Area Point No. 133	133	0	0	0	0	0	0	0	0
134	16-07-2025	Rim Seal Area Point No. 134	134	0	0	0	0	0	0	0	0
135	16-07-2025	Rim Seal Area Point No. 135	135	0	0	0	0	0	0	0	0
136	16-07-2025	Rim Seal Area Point No. 136	136	0	0	0	0	0	0	0	0
137	16-07-2025	Rim Seal Area Point No. 137	137	0	0	0	0	0	0	0	0
138	16-07-2025	Rim Seal Area Point No. 138	138	0	0	0	0	0	0	0	0
139	16-07-2025	Rim Seal Area Point No. 139	139	0	0	0	0	0	0	0	0
140	16-07-2025	Rim Seal Area Point No. 140	140	0	0	0	0	0	0	0	0
141	16-07-2025	Rim Seal Area Point No. 141	141	0	0	0	0	0	0	0	0
142	16-07-2025	Rim Seal Area Point No. 142	142	0	0	0	0	0	0	0	0
143	16-07-2025	Rim Seal Area Point No. 143	143	0	0	0	0	0	0	0	0
144	16-07-2025	Rim Seal Area Point No. 144	144	0	0	0	0	0	0	0	0
145	16-07-2025	Rim Seal Area Point No. 145	145	0	0	0	0	0	0	0	0
146	16-07-2025	Rim Seal Area Point No. 146	146	0	0	0	0	0	0	0	0
147	16-07-2025	Rim Seal Area Point No. 147	147	0	0	0	0	0	0	0	0
148	16-07-2025	Rim Seal Area Point No. 148	148	0	0	0	0	0	0	0	0
149	16-07-2025	Rim Seal Area Point No. 149	149	0	0	0	0	0	0	0	0
150	16-07-2025	Rim Seal Area Point No. 150	150	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-101-D-SERVICE CRUDE											
1	16-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	16-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	16-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	16-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	16-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	16-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	16-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	16-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	16-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	16-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	16-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	16-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	16-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	16-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	16-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	16-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	16-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	16-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	16-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	16-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	16-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	16-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	16-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	16-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	16-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	16-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	16-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	16-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	16-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	16-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	16-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	16-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	16-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	16-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	16-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	16-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	16-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	16-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	16-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	16-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	16-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	16-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	16-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	16-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	16-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	16-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	16-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	16-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	16-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	16-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	16-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	16-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	16-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	16-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	16-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	16-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	16-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	16-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	16-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	16-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	16-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	16-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	16-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	16-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	16-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	16-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	16-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	16-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	16-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	16-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	16-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	16-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	16-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	16-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	16-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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76	16-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	16-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	16-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	16-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	16-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	16-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	16-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	16-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	16-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	16-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	16-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	16-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	16-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	16-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	16-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	16-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	16-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	16-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	16-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	16-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	16-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	16-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	16-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	16-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	16-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0
101	16-07-2025	Rim Seal Area Point No. 101	101	0	0	0	0	0	0	0	0
102	16-07-2025	Rim Seal Area Point No. 102	102	0	0	0	0	0	0	0	0
103	16-07-2025	Rim Seal Area Point No. 103	103	0	0	0	0	0	0	0	0
104	16-07-2025	Rim Seal Area Point No. 104	104	0	0	0	0	0	0	0	0
105	16-07-2025	Rim Seal Area Point No. 105	105	0	0	0	0	0	0	0	0
106	16-07-2025	Rim Seal Area Point No. 106	106	0	0	0	0	0	0	0	0
107	16-07-2025	Rim Seal Area Point No. 107	107	0	0	0	0	0	0	0	0
108	16-07-2025	Rim Seal Area Point No. 108	108	0	0	0	0	0	0	0	0
109	16-07-2025	Rim Seal Area Point No. 109	109	0	0	0	0	0	0	0	0
110	16-07-2025	Rim Seal Area Point No. 110	110	0	0	0	0	0	0	0	0
111	16-07-2025	Rim Seal Area Point No. 111	111	0	0	0	0	0	0	0	0
112	16-07-2025	Rim Seal Area Point No. 112	112	0	0	0	0	0	0	0	0
113	16-07-2025	Rim Seal Area Point No. 113	113	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
114	16-07-2025	Rim Seal Area Point No. 114	114	0	0	0	0	0	0	0	0
115	16-07-2025	Rim Seal Area Point No. 115	115	0	0	0	0	0	0	0	0
116	16-07-2025	Rim Seal Area Point No. 116	116	0	0	0	0	0	0	0	0
117	16-07-2025	Rim Seal Area Point No. 117	117	0	0	0	0	0	0	0	0
118	16-07-2025	Rim Seal Area Point No. 118	118	0	0	0	0	0	0	0	0
119	16-07-2025	Rim Seal Area Point No. 119	119	0	0	0	0	0	0	0	0
120	16-07-2025	Rim Seal Area Point No. 120	120	0	0	0	0	0	0	0	0
121	16-07-2025	Rim Seal Area Point No. 121	121	0	0	0	0	0	0	0	0
122	16-07-2025	Rim Seal Area Point No. 122	122	0	0	0	0	0	0	0	0
123	16-07-2025	Rim Seal Area Point No. 123	123	0	0	0	0	0	0	0	0
124	16-07-2025	Rim Seal Area Point No. 124	124	0	0	0	0	0	0	0	0
125	16-07-2025	Rim Seal Area Point No. 125	125	0	0	0	0	0	0	0	0
126	16-07-2025	Rim Seal Area Point No. 126	126	0	0	0	0	0	0	0	0
127	16-07-2025	Rim Seal Area Point No. 127	127	0	0	0	0	0	0	0	0
128	16-07-2025	Rim Seal Area Point No. 128	128	0	0	0	0	0	0	0	0
129	16-07-2025	Rim Seal Area Point No. 129	129	0	0	0	0	0	0	0	0
130	16-07-2025	Rim Seal Area Point No. 130	130	0	0	0	0	0	0	0	0
131	16-07-2025	Rim Seal Area Point No. 131	131	0	0	0	0	0	0	0	0
132	16-07-2025	Rim Seal Area Point No. 132	132	0	0	0	0	0	0	0	0
133	16-07-2025	Rim Seal Area Point No. 133	133	0	0	0	0	0	0	0	0
134	16-07-2025	Rim Seal Area Point No. 134	134	0	0	0	0	0	0	0	0
135	16-07-2025	Rim Seal Area Point No. 135	135	0	0	0	0	0	0	0	0
136	16-07-2025	Rim Seal Area Point No. 136	136	0	0	0	0	0	0	0	0
137	16-07-2025	Rim Seal Area Point No. 137	137	0	0	0	0	0	0	0	0
138	16-07-2025	Rim Seal Area Point No. 138	138	0	0	0	0	0	0	0	0
139	16-07-2025	Rim Seal Area Point No. 139	139	0	0	0	0	0	0	0	0
140	16-07-2025	Rim Seal Area Point No. 140	140	0	0	0	0	0	0	0	0
141	16-07-2025	Rim Seal Area Point No. 141	141	0	0	0	0	0	0	0	0
142	16-07-2025	Rim Seal Area Point No. 142	142	0	0	0	0	0	0	0	0
143	16-07-2025	Rim Seal Area Point No. 143	143	0	0	0	0	0	0	0	0
144	16-07-2025	Rim Seal Area Point No. 144	144	0	0	0	0	0	0	0	0
145	16-07-2025	Rim Seal Area Point No. 145	145	0	0	0	0	0	0	0	0
146	16-07-2025	Rim Seal Area Point No. 146	146	0	0	0	0	0	0	0	0
147	16-07-2025	Rim Seal Area Point No. 147	147	0	0	0	0	0	0	0	0
148	16-07-2025	Rim Seal Area Point No. 148	148	0	0	0	0	0	0	0	0
149	16-07-2025	Rim Seal Area Point No. 149	149	0	0	0	0	0	0	0	0
150	16-07-2025	Rim Seal Area Point No. 150	150	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-102-A-SERVICE S.R NAPHTHA											
1	18-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	18-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	18-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	18-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	18-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	18-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	18-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	18-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	18-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	18-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	18-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	18-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	18-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	18-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	18-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	18-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	18-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	18-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	18-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	18-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	18-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	18-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	18-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	18-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	18-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	18-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	18-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	18-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	18-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	18-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	18-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	18-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	18-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	18-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	18-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	18-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	18-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	18-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	18-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	18-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	18-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	18-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	18-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	18-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	18-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	18-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	18-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	18-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	18-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	18-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	18-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	18-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	18-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	18-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	18-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	18-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	18-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	18-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	18-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	18-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	18-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	18-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	18-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	18-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	18-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	18-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	18-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	18-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	18-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	18-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	18-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	18-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	18-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	18-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	18-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	18-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	18-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	18-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	18-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	18-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-102-C-SERVICE HCU NAPHTHA											
1	18-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	18-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	18-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	18-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	18-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	18-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	18-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	18-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	18-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	18-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	18-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	18-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	18-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	18-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	18-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	18-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	18-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	18-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	18-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	18-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	18-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	18-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	18-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	18-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	18-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	18-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	18-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	18-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	18-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	18-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	18-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	18-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	18-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	18-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	18-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	18-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	18-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	18-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	18-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	18-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	18-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	18-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	18-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	18-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	18-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	18-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	18-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	18-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	18-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	18-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	18-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	18-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	18-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	18-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	18-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	18-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	18-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	18-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	18-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	18-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	18-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	18-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	18-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	18-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	18-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	18-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	18-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	18-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	18-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	18-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	18-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	18-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	18-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	18-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	18-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	18-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	18-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	18-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	18-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	18-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO:-44-TT-FR-117 (A) SERVICE-ISOMERATE REFORMAT											
1	18-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	18-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	18-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	18-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	18-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	18-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	18-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	18-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	18-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	18-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	18-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	18-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	18-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	18-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	18-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	18-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	18-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	18-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	18-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	18-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	18-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	18-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	18-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	18-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	18-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	18-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	18-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	18-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	18-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	18-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	18-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	18-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	18-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	18-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	18-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	18-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	18-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	18-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	18-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	18-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	18-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	18-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	18-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	18-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	18-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	18-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	18-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	18-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	18-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	18-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	18-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	18-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	18-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	18-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	18-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO:-44-TT-FR-117 (B) SERVICE-ISOMERATE REFORMAT											
1	18-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	18-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	18-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	18-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	18-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	18-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	18-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	18-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	18-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	18-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	18-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	18-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	18-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	18-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	18-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	18-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	18-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	18-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	18-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	18-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	18-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	18-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	18-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	18-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	18-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	18-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	18-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	18-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	18-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	18-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	18-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	18-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	18-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	18-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	18-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	18-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	18-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	18-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	18-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	18-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	18-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	18-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	18-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	18-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	18-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	18-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	18-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	18-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	18-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	18-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	18-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	18-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	18-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	18-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	18-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-104-A-SERVICE HSD											
1	21-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	21-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	21-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	21-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	21-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	21-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	21-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	21-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	21-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	21-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	21-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	21-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	21-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	21-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	21-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	21-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	21-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	21-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	21-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	21-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	21-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	21-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	21-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	21-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	21-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	21-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	21-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	21-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	21-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	21-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	21-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	21-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	21-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	21-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	21-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	21-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	21-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	21-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	21-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	21-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	21-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	21-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	21-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	21-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	21-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	21-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	21-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	21-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	21-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	21-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	21-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	21-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	21-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	21-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	21-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	21-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	21-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	21-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	21-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	21-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	21-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	21-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	21-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	21-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	21-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	21-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	21-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	21-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	21-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	21-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	21-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	21-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	21-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	21-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	21-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	21-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	21-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	21-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	21-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	21-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	21-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	21-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	21-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	21-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	21-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	21-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	21-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	21-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	21-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	21-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	21-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	21-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	21-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	21-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	21-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	21-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	21-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	21-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	21-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-104-B-SERVICE SLOP											
1	21-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	21-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	21-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	21-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	21-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	21-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	21-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	21-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	21-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	21-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	21-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	21-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	21-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	21-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	21-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	21-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	21-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	21-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	21-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	21-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	21-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	21-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	21-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	21-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	21-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	21-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	21-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	21-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	21-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	21-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	21-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	21-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	21-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	21-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	21-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	21-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	21-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	21-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	21-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	21-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	21-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	21-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	21-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	21-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	21-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	21-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	21-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	21-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	21-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	21-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	21-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	21-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	21-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	21-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	21-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	21-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	21-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	21-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	21-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	21-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	21-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	21-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	21-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	21-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	21-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	21-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	21-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	21-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	21-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	21-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	21-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	21-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	21-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	21-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	21-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	21-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	21-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	21-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	21-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	21-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	21-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	21-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	21-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	21-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	21-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	21-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	21-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	21-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	21-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	21-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	21-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	21-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	21-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	21-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	21-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	21-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	21-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	21-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	21-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-104-C-SERVICE HSD											
1	21-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	21-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	21-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	21-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	21-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	21-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	21-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	21-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	21-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	21-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	21-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	21-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	21-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	21-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	21-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	21-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	21-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	21-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	21-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	21-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	21-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	21-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	21-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	21-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	21-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	21-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	21-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	21-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	21-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	21-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	21-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	21-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	21-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	21-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	21-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	21-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	21-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	21-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	21-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	21-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	21-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	21-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	21-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	21-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	21-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	21-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	21-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	21-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	21-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	21-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	21-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	21-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	21-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	21-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	21-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	21-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	21-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	21-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	21-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	21-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	21-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	21-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	21-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	21-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	21-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	21-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	21-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	21-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	21-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	21-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	21-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	21-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	21-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	21-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	21-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	21-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	21-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	21-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	21-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	21-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	21-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	21-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	21-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	21-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	21-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	21-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	21-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	21-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	21-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	21-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	21-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	21-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	21-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	21-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	21-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	21-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	21-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	21-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	21-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-44-TT-FR-105-C-SERVICE HSD											
1	21-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	21-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	21-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	21-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	21-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	21-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	21-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	21-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	21-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	21-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	21-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	21-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	21-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	21-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	21-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	21-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	21-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	21-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	21-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	21-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	21-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	21-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	21-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	21-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	21-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	21-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	21-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	21-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	21-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	21-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	21-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	21-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	21-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	21-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	21-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	21-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	21-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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38	21-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	21-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	21-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	21-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	21-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	21-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	21-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	21-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	21-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	21-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	21-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	21-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	21-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0
51	21-07-2025	Rim Seal Area Point No. 51	51	0	0	0	0	0	0	0	0
52	21-07-2025	Rim Seal Area Point No. 52	52	0	0	0	0	0	0	0	0
53	21-07-2025	Rim Seal Area Point No. 53	53	0	0	0	0	0	0	0	0
54	21-07-2025	Rim Seal Area Point No. 54	54	0	0	0	0	0	0	0	0
55	21-07-2025	Rim Seal Area Point No. 55	55	0	0	0	0	0	0	0	0
56	21-07-2025	Rim Seal Area Point No. 56	56	0	0	0	0	0	0	0	0
57	21-07-2025	Rim Seal Area Point No. 57	57	0	0	0	0	0	0	0	0
58	21-07-2025	Rim Seal Area Point No. 58	58	0	0	0	0	0	0	0	0
59	21-07-2025	Rim Seal Area Point No. 59	59	0	0	0	0	0	0	0	0
60	21-07-2025	Rim Seal Area Point No. 60	60	0	0	0	0	0	0	0	0
61	21-07-2025	Rim Seal Area Point No. 61	61	0	0	0	0	0	0	0	0
62	21-07-2025	Rim Seal Area Point No. 62	62	0	0	0	0	0	0	0	0
63	21-07-2025	Rim Seal Area Point No. 63	63	0	0	0	0	0	0	0	0
64	21-07-2025	Rim Seal Area Point No. 64	64	0	0	0	0	0	0	0	0
65	21-07-2025	Rim Seal Area Point No. 65	65	0	0	0	0	0	0	0	0
66	21-07-2025	Rim Seal Area Point No. 66	66	0	0	0	0	0	0	0	0
67	21-07-2025	Rim Seal Area Point No. 67	67	0	0	0	0	0	0	0	0
68	21-07-2025	Rim Seal Area Point No. 68	68	0	0	0	0	0	0	0	0
69	21-07-2025	Rim Seal Area Point No. 69	69	0	0	0	0	0	0	0	0
70	21-07-2025	Rim Seal Area Point No. 70	70	0	0	0	0	0	0	0	0
71	21-07-2025	Rim Seal Area Point No. 71	71	0	0	0	0	0	0	0	0
72	21-07-2025	Rim Seal Area Point No. 72	72	0	0	0	0	0	0	0	0
73	21-07-2025	Rim Seal Area Point No. 73	73	0	0	0	0	0	0	0	0
74	21-07-2025	Rim Seal Area Point No. 74	74	0	0	0	0	0	0	0	0
75	21-07-2025	Rim Seal Area Point No. 75	75	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
76	21-07-2025	Rim Seal Area Point No. 76	76	0	0	0	0	0	0	0	0
77	21-07-2025	Rim Seal Area Point No. 77	77	0	0	0	0	0	0	0	0
78	21-07-2025	Rim Seal Area Point No. 78	78	0	0	0	0	0	0	0	0
79	21-07-2025	Rim Seal Area Point No. 79	79	0	0	0	0	0	0	0	0
80	21-07-2025	Rim Seal Area Point No. 80	80	0	0	0	0	0	0	0	0
81	21-07-2025	Rim Seal Area Point No. 81	81	0	0	0	0	0	0	0	0
82	21-07-2025	Rim Seal Area Point No. 82	82	0	0	0	0	0	0	0	0
83	21-07-2025	Rim Seal Area Point No. 83	83	0	0	0	0	0	0	0	0
84	21-07-2025	Rim Seal Area Point No. 84	84	0	0	0	0	0	0	0	0
85	21-07-2025	Rim Seal Area Point No. 85	85	0	0	0	0	0	0	0	0
86	21-07-2025	Rim Seal Area Point No. 86	86	0	0	0	0	0	0	0	0
87	21-07-2025	Rim Seal Area Point No. 87	87	0	0	0	0	0	0	0	0
88	21-07-2025	Rim Seal Area Point No. 88	88	0	0	0	0	0	0	0	0
89	21-07-2025	Rim Seal Area Point No. 89	89	0	0	0	0	0	0	0	0
90	21-07-2025	Rim Seal Area Point No. 90	90	0	0	0	0	0	0	0	0
91	21-07-2025	Rim Seal Area Point No. 91	91	0	0	0	0	0	0	0	0
92	21-07-2025	Rim Seal Area Point No. 92	92	0	0	0	0	0	0	0	0
93	21-07-2025	Rim Seal Area Point No. 93	93	0	0	0	0	0	0	0	0
94	21-07-2025	Rim Seal Area Point No. 94	94	0	0	0	0	0	0	0	0
95	21-07-2025	Rim Seal Area Point No. 95	95	0	0	0	0	0	0	0	0
96	21-07-2025	Rim Seal Area Point No. 96	96	0	0	0	0	0	0	0	0
97	21-07-2025	Rim Seal Area Point No. 97	97	0	0	0	0	0	0	0	0
98	21-07-2025	Rim Seal Area Point No. 98	98	0	0	0	0	0	0	0	0
99	21-07-2025	Rim Seal Area Point No. 99	99	0	0	0	0	0	0	0	0
100	21-07-2025	Rim Seal Area Point No. 100	100	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-41-TT-FR-114-A-SERVICE SLOPS (DRY)											
1	25-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	25-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	25-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	25-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	25-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	25-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	25-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	25-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	25-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	25-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	25-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	25-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	25-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	25-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	25-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	25-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	25-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	25-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	25-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	25-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	25-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	25-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	25-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	25-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	25-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	25-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	25-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	25-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	25-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	25-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	25-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	25-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	25-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	25-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	25-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	25-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	25-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	25-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	25-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	25-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-41-TT-FR-114-B-SERVICE SLOPS (DRY)											
1	25-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	25-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	25-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	25-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	25-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	25-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	25-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	25-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	25-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	25-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	25-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	25-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	25-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	25-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	25-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	25-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	25-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	25-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	25-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	25-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	25-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	25-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	25-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	25-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	25-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	25-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	25-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	25-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	25-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	25-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	25-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	25-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	25-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	25-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	25-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	25-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	25-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	25-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	25-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	25-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-41-TT-FR-114-C-SERVICE SLOPS (DRY)											
1	25-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	25-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	25-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	25-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	25-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	25-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	25-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	25-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	25-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	25-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	25-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	25-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	25-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	25-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	25-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	25-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	25-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	25-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	25-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	25-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	25-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	25-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	25-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	25-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	25-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	25-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	25-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	25-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	25-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	25-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	25-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	25-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	25-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	25-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	25-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	25-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	25-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	25-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	25-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	25-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-41-TT-FR-121-A-SERVICE DHDH FEED											
1	25-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	25-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	25-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	25-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	25-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	25-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	25-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	25-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	25-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	25-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	25-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	25-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	25-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	25-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	25-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	25-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	25-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	25-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	25-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	25-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	25-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	25-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	25-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	25-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	25-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	25-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	25-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	25-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	25-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	25-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	25-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	25-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	25-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	25-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	25-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	25-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	25-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	25-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	25-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	25-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	25-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	25-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	25-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	25-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	25-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	25-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	25-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	25-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	25-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	25-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
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TANK NO-41-TT-FR-121-B-SERVICE DHD T FEED											
1	25-07-2025	Level Indicator Connecting Point Rim Seal Area	1	0	0	0	0	0	0	0	0
2	25-07-2025	Rim Seal Area Point No. 2	2	0	0	0	0	0	0	0	0
3	25-07-2025	Rim Seal Area Point No. 3	3	0	0	0	0	0	0	0	0
4	25-07-2025	Rim Seal Area Point No. 4	4	0	0	0	0	0	0	0	0
5	25-07-2025	Rim Seal Area Point No. 5	5	0	0	0	0	0	0	0	0
6	25-07-2025	Rim Seal Area Point No. 6	6	0	0	0	0	0	0	0	0
7	25-07-2025	Rim Seal Area Point No. 7	7	0	0	0	0	0	0	0	0
8	25-07-2025	Rim Seal Area Point No. 8	8	0	0	0	0	0	0	0	0
9	25-07-2025	Rim Seal Area Point No. 9	9	0	0	0	0	0	0	0	0
10	25-07-2025	Rim Seal Area Point No. 10	10	0	0	0	0	0	0	0	0
11	25-07-2025	Rim Seal Area Point No. 11	11	0	0	0	0	0	0	0	0
12	25-07-2025	Rim Seal Area Point No. 12	12	0	0	0	0	0	0	0	0
13	25-07-2025	Rim Seal Area Point No. 13	13	0	0	0	0	0	0	0	0
14	25-07-2025	Rim Seal Area Point No. 14	14	0	0	0	0	0	0	0	0
15	25-07-2025	Rim Seal Area Point No. 15	15	0	0	0	0	0	0	0	0
16	25-07-2025	Rim Seal Area Point No. 16	16	0	0	0	0	0	0	0	0
17	25-07-2025	Rim Seal Area Point No. 17	17	0	0	0	0	0	0	0	0
18	25-07-2025	Rim Seal Area Point No. 18	18	0	0	0	0	0	0	0	0
19	25-07-2025	Rim Seal Area Point No. 19	19	0	0	0	0	0	0	0	0
20	25-07-2025	Rim Seal Area Point No. 20	20	0	0	0	0	0	0	0	0
21	25-07-2025	Rim Seal Area Point No. 21	21	0	0	0	0	0	0	0	0
22	25-07-2025	Rim Seal Area Point No. 22	22	0	0	0	0	0	0	0	0
23	25-07-2025	Rim Seal Area Point No. 23	23	0	0	0	0	0	0	0	0
24	25-07-2025	Rim Seal Area Point No. 24	24	0	0	0	0	0	0	0	0
25	25-07-2025	Rim Seal Area Point No. 25	25	0	0	0	0	0	0	0	0
26	25-07-2025	Rim Seal Area Point No. 26	26	0	0	0	0	0	0	0	0
27	25-07-2025	Rim Seal Area Point No. 27	27	0	0	0	0	0	0	0	0
28	25-07-2025	Rim Seal Area Point No. 28	28	0	0	0	0	0	0	0	0
29	25-07-2025	Rim Seal Area Point No. 29	29	0	0	0	0	0	0	0	0
30	25-07-2025	Rim Seal Area Point No. 30	30	0	0	0	0	0	0	0	0
31	25-07-2025	Rim Seal Area Point No. 31	31	0	0	0	0	0	0	0	0
32	25-07-2025	Rim Seal Area Point No. 32	32	0	0	0	0	0	0	0	0
33	25-07-2025	Rim Seal Area Point No. 33	33	0	0	0	0	0	0	0	0
34	25-07-2025	Rim Seal Area Point No. 34	34	0	0	0	0	0	0	0	0
35	25-07-2025	Rim Seal Area Point No. 35	35	0	0	0	0	0	0	0	0
36	25-07-2025	Rim Seal Area Point No. 36	36	0	0	0	0	0	0	0	0
37	25-07-2025	Rim Seal Area Point No. 37	37	0	0	0	0	0	0	0	0

Sr.No.	Date	Location	Tag No.	Line Size	Component Type	Screening Value (PPM) before Repair	Emission Kg/Hr	Emission Kg/day	Screening Value (PPM) after Repair	Emission Kg/Hr	Emission Kg/day
38	25-07-2025	Rim Seal Area Point No. 38	38	0	0	0	0	0	0	0	0
39	25-07-2025	Rim Seal Area Point No. 39	39	0	0	0	0	0	0	0	0
40	25-07-2025	Rim Seal Area Point No. 40	40	0	0	0	0	0	0	0	0
41	25-07-2025	Rim Seal Area Point No. 41	41	0	0	0	0	0	0	0	0
42	25-07-2025	Rim Seal Area Point No. 42	42	0	0	0	0	0	0	0	0
43	25-07-2025	Rim Seal Area Point No. 43	43	0	0	0	0	0	0	0	0
44	25-07-2025	Rim Seal Area Point No. 44	44	0	0	0	0	0	0	0	0
45	25-07-2025	Rim Seal Area Point No. 45	45	0	0	0	0	0	0	0	0
46	25-07-2025	Rim Seal Area Point No. 46	46	0	0	0	0	0	0	0	0
47	25-07-2025	Rim Seal Area Point No. 47	47	0	0	0	0	0	0	0	0
48	25-07-2025	Rim Seal Area Point No. 48	48	0	0	0	0	0	0	0	0
49	25-07-2025	Rim Seal Area Point No. 49	49	0	0	0	0	0	0	0	0
50	25-07-2025	Rim Seal Area Point No. 50	50	0	0	0	0	0	0	0	0

Annexure-VI



NUMALIGARH REFINERY LIMITED (Quality Control Department)

Test Report of ground water monitoring well sample of Secured Landfill (For the Month of May 2025)

Date of sampling : 10.05.2025
Sampling Point : Ground water monitoring well (North-West)
Date of Certification: 12.05.2025
Analyzed by : Krishna Baruah

Sl No.	Parameters	Requirement as per IS 10500 : 2012 (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of test, Ref to the part of IS 3025	Results
1	Odor	Agreeable	Agreeable	Part 5	Odorless
2	pH Value	6.5-8.5	No relaxation	Part 11	7.5
3	Iron (as Fe), mg/l, Max	0.3	No relaxation	Part 53	2.00
4	Copper (as Cu), mg/l, Max	0.05	1.5	Part 42	0.00
5	Nickel (as Ni), mg/l, Max	0.02	No relaxation	Part 54	0.00
6	Cadmium (as Cd), mg/l, Max	0.003	No relaxation	Part 41	0.0
7	Total arsenic (as As), mg/l, Max	0.01	0.05	Part 37	0.00
8	Lead (as Pb), mg/l, Max	0.01	No relaxation	Part 47	0.000
9	Zinc (as Zn), mg/l, Max	5	15	Part 49	0.001
10	Total chromium (as Cr), mg/l, Max	0.05	No relaxation	Part 52	0.000
11	Magnesium (as Mg), mg/l, Max	30	100	Part 46	2.20
12	Calcium (as Ca), mg/l, Max	75	200	Part 40	9.70
13	Selenium (as Se), mg/l, Max	0.01	No relaxation	Part 56	0.00
14	Sodium(as Na), mg/l	***	***	Section 3120 B. APHA-AWWA	8.20

Baruah
Certified by: Dr Bedobrat Barhai [बेदब्रत बर्हई]
Sr Officer (Quality Control)

बेदब्रत बर्हई/BEDOB RAT BARHAI
वरिष्ठ अधिकारी (गुणवत्ता नियंत्रण)/Sr. Officer (Quality Control)
नुमालीगढ़ रिफाइनरी लिमिटेड / Numaligarh Refinery Limited
गोलाघाट, असम - 785 699 / Golaghat, Assam - 785 699



NUMALIGARH REFINERY LIMITED

(Quality Control Department)

Test Report of ground water monitoring well sample of Secured Landfill (For the Month of May 2025)

Date of sampling : 10.05.2025
Sampling Point : Ground water monitoring well (South-West)
Date of Certification: 12.05.2025
Analyzed by : Krishna Baruah

Sl No.	Parameters	Requirement as per IS 10500 : 2012 (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of test, Ref to the part of IS 3025	Results
1	Odor	Agreeable	Agreeable	Part 5	Odorless
2	pH Value	6.5-8.5	No relaxation	Part 11	7.5
3	Iron (as Fe), mg/l, Max	0.3	No relaxation	Part 53	1.10
4	Copper (as Cu), mg/l, Max	0.05	1.5	Part 42	0.00
5	Nickel (as Ni), mg/l, Max	0.02	No relaxation	Part 54	0.00
6	Cadmium (as Cd), mg/l, Max	0.003	No relaxation	Part 41	0.00
7	Total arsenic (as As), mg/l, Max	0.01	0.05	Part 37	0.00
8	Lead (as Pb), mg/l, Max	0.01	No relaxation	Part 47	0.00
9	Zinc (as Zn), mg/l, Max	5	15	Part 49	0.001
10	Total chromium (as Cr), mg/l, Max	0.05	No relaxation	Part 52	0.00
11	Magnesium (as Mg), mg/l, Max	30	100	Part 46	4.90
12	Calcium (as Ca), mg/l, Max	75	200	Part 40	11.80
13	Selenium (as Se), mg/l, Max	0.01	No relaxation	Part 56	0.00
14	Sodium(as Na), mg/l	***	***	Section 3120 B. APHA-AWWA	10.68

Certified by: Dr Bedobrat Barhai [बेदब्रत बर्हई]

Sr Officer (Quality Control)

बेदब्रत बर्हई/BEDOBRAT BARHAI

वरिष्ठ अधिकारी (गुणवत्ता नियंत्रण)/Sr. Officer (Quality Control)
नुमालीगढ़ रिफाइनरी लिमिटेड / Numaligarh Refinery Limited
गोलाघाट, असम - 785 699 / Golaghat, Assam - 785 699



NUMALIGARH REFINERY LIMITED

(Quality Control Department)

Test Report of ground water monitoring well sample of Secured Landfill (For the Month of May 2025)

Date of sampling : 10.05.2025
Sampling Point : Ground water monitoring well (South-East)
Date of Certification: 12.05.2025
Analyzed by : Krishna Baruah

Sl No.	Parameters	Requirement as per IS 10500 : 2012 (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of test, Ref to the part of IS 3025	Results
1	Odor	Agreeable	Agreeable	Part 5	Odorless
2	pH Value	6.5-8.5	No relaxation	Part 11	6.5
3	Iron (as Fe), mg/l, Max	0.3	No relaxation	Part 53	6.10
4	Copper (as Cu), mg/l, Max	0.05	1.5	Part 42	0.00
5	Nickel (as Ni), mg/l, Max	0.02	No relaxation	Part 54	0.01
6	Cadmium (as Cd), mg/l, Max	0.003	No relaxation	Part 41	0.00
7	Total arsenic (as As), mg/l, Max	0.01	0.05	Part 37	0.00
8	Lead (as Pb), mg/l, Max	0.01	No relaxation	Part 47	0.00
9	Zinc (as Zn), mg/l, Max	5	15	Part 49	0.001
10	Total chromium (as Cr), mg/l, Max	0.05	No relaxation	Part 52	0.05
11	Magnesium (as Mg), mg/l, Max	30	100	Part 46	6.40
12	Calcium (as Ca), mg/l, Max	75	200	Part 40	10.80
13	Selenium (as Se), mg/l, Max	0.01	No relaxation	Part 56	0.00
14	Sodium (as Na), mg/l	***	***	Section 3120 B. APHA-AWWA	9.82

Certified by: Dr Bedobrat Barhai [बेदब्रत बर्हई]

Sr Officer (Quality Control)

बेदब्रत बर्हई/BEDOB RAT BARHAI

वरिष्ठ अधिकारी (गुणवत्ता नियंत्रण)/Sr. Officer (Quality Control)

नुमालीगढ़ रिफाइनरी लिमिटेड / Numaligarh Refinery Limited

गोलाघाट, असम - 785 699 / Golaghat, Assam - 785 699



NUMALIGARH REFINERY LIMITED

(Quality Control Department)

Test Report of ground water monitoring well sample of Secured Landfill (For the Month of May 2025)

Date of sampling : 10.05.2025
Sampling Point : Ground water monitoring well (North-East)
Date of Certification: 12.05.2025
Analyzed by : Krishna Baruah

Sl No.	Parameters	Requirement as per IS 10500 : 2012 (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of test, Ref to the part of IS 3025	Results
1	Odor	Agreeable	Agreeable	Part 5	Odorless
2	pH Value	6.5-8.5	No relaxation	Part 11	7.5
3	Iron (as Fe), mg/l, Max	0.3	No relaxation	Part 53	140.0
4	Copper (as Cu), mg/l, Max	0.05	1.5	Part 42	0.000
5	Nickel (as Ni), mg/l, Max	0.02	No relaxation	Part 54	0.02
6	Cadmium (as Cd), mg/l, Max	0.003	No relaxation	Part 41	0.000
7	Total arsenic (as As), mg/l, Max	0.01	0.05	Part 37	0.000
8	Lead (as Pb), mg/l, Max	0.01	No relaxation	Part 47	0.000
9	Zinc (as Zn), mg/l, Max	5	15	Part 49	0.001
10	Total chromium (as Cr), mg/l, Max	0.05	No relaxation	Part 52	0.000
11	Magnesium (as Mg), mg/l, Max	30	100	Part 46	5.80
12	Calcium (as Ca), mg/l, Max	75	200	Part 40	12.80
13	Selenium (as Se), mg/l, Max	0.01	No relaxation	Part 56	0.000
14	Sodium(as Na), mg/l	***	***	Section 3120 B. APHA-AWWA	11.26

Barhai
Certified by: Dr Bedobrat Barhai [बेदब्रत बर्हई]
Sr Officer (Quality Control)

बेदब्रत बर्हई/BEDOB RAT BARHAI

वरिष्ठ अधिकारी (गुणवत्ता नियंत्रण)/Sr. Officer (Quality Control)
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