

IFFCOWholly owned by Cooperatives
KANDLA UNIT

इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड

INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

24.05.2024

To
Ministry of Environment, Forest & Climate Change
Integrated Regional Office,
Gandhinagar A wing – 407 & 409,
Aranya Bhawan, Near CH-3 Circle, Sector-10A,
Gandhi Nagar-382010, Gujarat

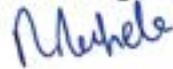
Sub: Half Yearly Compliance Report for the period Oct-2023 to Mar-2024 for Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 KL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO)

Ref: Ministry of Environment & Forests, New Delhi Environment Clearance letter No. F. No. J-11011/202/2009-I.A.II(I) dated 27.02.2024

Dear Sir,

With reference to the above referred Environmental Clearance issued to Kandla plant for the Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 KL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO), enclosed please find herewith the Half Yearly Compliance Report for the period Oct-2023 to Mar-2024 in respect of the stipulated Environmental Clearance terms and conditions.

With Kind Regards,



Rajesh Ruhela
Jt. General Manager (Technical)

Cc: The Member Secretary, Gujarat Pollution Control Board (GPCB), Paryavaran Bhavan, Sector 10 A, Gandhinagar - 382 043, Gujarat.

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018
BUREAU VERITAS
Certification



कांडला इकाई / Kandla Unit, कांडला / Kandla, कच्छ / Kutch, (गुजरात) / (Gujarat) - 370 210.
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INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
KANDLA UNIT

Half yearly compliance reports
Period October-23 to March-2024

Sub: Grant of prior Environmental Clearance (EC) for Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) under the provision of the EIA Notification 2006

Ref: Environment Clearance F. No. J-11011/202/2009-IA II (I), dtd 27/02/2024 from Ministry of Environment, Forest and Climate Change (I. A. Division)

Part A - SPECIFIC CONDITIONS:

Sr. No.	Environmental /Safeguards	Conditions	Compliances
1.	A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the. PP shall engage Unit head-HOD (Technical) – HOD Process Engineering- HOS (Laboratory). In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.	<p>Complied.</p> <p>Plant has an EMC & EHS cell to monitor the implementation of the EMP & EHS. Cell is chaired by the Jt. General Manager (Technical) under supervision of Unit Head.</p> <p>Environment Management Cell is having four officials with other supporting members to operate and ensure EMP in the plant.</p> <p>Plant has also established laboratory facilities in the plant for environment monitoring. Facilities for chemical analysis is set up in plant premises. Various quality monitoring instruments are available at Central Laboratory for analysis of raw materials, gaseous and liquid composition in the process and Final product.</p> <p>Standard methods are used for collection of liquid and gaseous samples. All the relevant Environment and quality monitoring instruments are calibrated periodically through external agency / inhouse. Standard operating procedures for analysis of various parameters have been prepared and followed.</p>	

Sr. No.	Environmental /Safeguards Conditions	Compliances
		IFFCO Kandla has spent Rs. 175.89 Lakhs towards engagement for qualified persons in EMC cell for FY 2023-24. Certified statement of the same is attached as Annexure-IV .
2.	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. The budget propose under EMP is 1552.55 Lakhs (Capital cost) and Rs.3359.13 lakhs per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.	<p>Complied.</p> <p>IFFCO Kandla has spent Rs. 14.70 Crore against various modifications for Environment Management during FY 2023-24. Certified statement of the same is attached as Annexure-V.</p> <p>Proof of implementation of activities proposed under EMP supported by photographs is attached as Annexure-VI.</p> <p>Also, total investment of Rs. 63.97 Lakhs has been made by IFFCO Kandla for development and Upkeep of Green Belt area during FY 2023-24 in Kandla plant and Township.</p>
3.	As proposed Low Sulfur Furnace Oil/ coal shall be used as a primary fuel. The phasing out of coal may be explored.	<p>Complied</p> <p>Coal is used as a primary fuel and Low Sulphur Furnace Oil is being used as standby fuel.</p>
4.	The PP reported that the existing freshwater requirement of the plant is 1132.5 KLD (Industrial- 902.5 KLD; Domestic- 230 KLD) being sourced from Gujarat Water Supply & Sewerage Board (GWSSB). The freshwater requirement of the project after expansion will be 1522.5 KLD (Industrial: 1281.5 KLD; Domestic: 241 KLD). The PP shall ensure that water supply should not be above the permissible limit and fresh water shall be withdrawn only after obtaining requisite permission from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July	<p>Complied</p> <p>Presently construction of proposed expansion project has not been started. Accordingly, no freshwater is required for proposed expansion project.</p> <p>Existing industrial freshwater requirement is below permissible limit of 1132.5 KLD for Kandla Plant.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances
	of every year for the activities carried out during the previous year.	
5.	<p>Under existing phase, Industrial wastewater along with effluent generated from the plant (124 KLD) is being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant. Hence, the plant is Zero liquid effluent discharge (ZLD) based plant. Domestic Sewage (200 KLD) is treated in Sewage Treatment Plant and the treated effluent is being used for horticultural purposes in the plant. Under proposed Nano-DAP fertilizer plant, wastewater generation from plant will be 35 KLD (Process & Washing- 2 KLD; Cooling Tower Blow Down- 24 KLD & Domestic Sewage- 9 KLD). Process effluent and cooling tower blow down will be discharged to Effluent Collection Pit that will be scrubbed in NPK-II Plant. Domestic sewage will be treated in proposed Sewage Treatment Plant (Capacity-10 KLD). Treated water will be reused for horticultural purposes. Total wastewater generation after expansion will be 359 KLD (Industrial Effluent: 150 KLD; Domestic Sewage: 209 KLD). Industrial Effluent will be Collected in Effluent Collection Pit from where it shall be recycled to scrubber area of NPK-II plant. Domestic sewage will be treated in STP's (Existing- 250 KLD & Proposed-10 KLD). STP treated water will be reused within the plant for horticultural purposes.</p>	<p>Complied</p> <p>Presently construction of proposed expansion project has not been started. Accordingly, no wastewater is generated from proposed expansion project.</p> <p>Industrial wastewater along with effluent generated from the plant are being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant. Hence, the plant is Zero liquid effluent discharge (ZLD) based plant.</p> <p>Domestic Sewage is treated in Sewage Treatment Plant and the treated effluent is being used for horticultural purposes in the plant.</p>
6.	<p>No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.</p>	<p>Complied</p> <p>IFFCO Kandla does not utilize any banned chemicals for manufacturing of NPK/DAP and water-Soluble fertilizers.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances
7.	The project proponent shall comply with the environment norms for Chemical Fertilizer Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 1607 (E), dated 29.12.2017 under the provisions of the Environment (Protection) Rules, 1986.	<p>Complied</p> <p>IFFCO Kandla unit complies with all environmental protection measures and safeguards for Chemical Fertilizer Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 1607 (E), dated 29.12.2017 under the provisions of the Environment (Protection) Rules, 1986.</p> <p>Emission from process stack and flue gas stack is under GPCB permissible limits.</p> <p>Continuous Emission Monitoring System (CEMS) is installed in the process & utility stacks for monitoring and emission parameter of process stack of NPK/DAP plant are uploaded on CPCB server on real time basis. Photographs of CPCB server data transfer is attached as Annexure-VII.</p> <p>Also, regular stack/vent monitoring is being done by inhouse and NABL/MoEF&CC approved Lab. All the stacks/Vents are meeting the MoEF&CC/GPCB/CPCB norms. Latest Test Report is attached as Annexure-VIII.</p> <p>Industrial wastewater along with effluent generated from the plant are being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant. Hence, Kandla plant is Zero liquid effluent discharge (ZLD) based plant.</p> <p>Domestic sewage is treated in Sewage Treatment Plant and the treated effluent is being used for horticultural purposes in the plant.</p>
8.	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report	<p>Complied</p> <p><u>Greenbelt Development:</u> IFFCO Kandla Unit has developed green area inside and outside the IFFCO Plant.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances						
	shall be submitted to the IRO, MoEF&CC in this regard.	<p>Total green cover is approximately 90 Acres and its details is given below:</p> <table border="1" data-bbox="906 365 1528 517"> <tr> <td>Plant</td> <td>Approximately 11 Acres</td> </tr> <tr> <td>Township</td> <td>Approximately 75 Acres</td> </tr> <tr> <td>Gandhidham town</td> <td>Approximately 4 Acres</td> </tr> </table> <p>Photographs showing green area in plant area and Township is attached as Annexure-IX.</p> <p>Additionally, IFFCO has carried out green belt development in Pantiya Village of Kutch District with approx. 41736 no. of trees in the village (113 Acres area). Innumerable efforts have been made for green belt development in other areas also.</p> <p><u>Renewable Energy Resources</u></p> <p>a).Solar roof top panels of total capacity 720 kWp has been installed at various buildings of Plant and Township (360 kWp each) at a cost of Rs. 4.66 crore. 565 MWh of power was generated by Solar roof top panels during the year 2023 - 24 (equivalent to 396 MT of CO₂ emission reduction @ 0.7 kg CO₂/kWh)</p> <p>b).Electric vehicles and battery-operated trolleys are being utilized for material transport within plant premises.</p> <p><u>Development of Nano Fertilizers</u></p> <p>The newly proposed technology i.e., Nanotechnology is the latest development in R&D of IFFCO that has become proven to manufacture nano fertilisers without emitting pollution into environment and thereby will reduce carbon footprint.</p> <p>In this way, IFFCO Kandla is working for reducing overall carbon footprint.</p>	Plant	Approximately 11 Acres	Township	Approximately 75 Acres	Gandhidham town	Approximately 4 Acres
Plant	Approximately 11 Acres							
Township	Approximately 75 Acres							
Gandhidham town	Approximately 4 Acres							
9.	All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time,	<p>Complied</p> <p>IFFCO Kandla is having full-fledged dedicated Fire & Safety Department with qualified and experienced Fire Staff available round the clock to control/mitigate any emergency.</p> <p>No major accidents have been registered in the plant during the said period.</p>						

Sr. No.	Environmental Conditions /Safeguards	Compliances
	and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.	<p>All necessary precautions have been taken to avoid accidents and action plan has been implemented for avoiding accidents. Mock drills are conducted on half yearly basis.</p> <p>Onsite emergency plan is attached as Annexure-X(a) latest mock drill report is attached as Annexure-X(b).</p>
10.	The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.	<p>Complied</p> <p>There are no Volatile organic compounds (VOCs) in the manufacturing process of the plant.</p> <p>Regular work zone monitoring is being done in plant by inhouse and NABL/MoEF&CC approved lab. Latest Test Report is attached as Annexure-XI.</p>
11.	The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.	<p>Complied</p> <p>The toxic/hazardous raw materials are stored/ maintained with bare minimum with respect to quantity and inventory.</p> <p>Details of stock of toxic/hazardous raw materials with quantity attached as Annexure-XII.</p>
12.	The occupational health centre for surveillance of the worker's health shall be set up. 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.	<p>Complied</p> <p>Different plans and measures are adopted by the Plant to ensure the occupational health & safety of all contract workers. Occupational Health & Safety policy is developed at the plant. Pre-placement and periodical examination (Physical examination, Urine Routine examination, Hematology, LFT, Blood Sugar, chest x rays, Audiometry, Spirometry, Vision testing, ECG, etc.) of Staff and workers is being done by IFFCO to analyze the health status as per DGMS guideline. Record of the same has been maintained in the plant and submitted to the concerned department.</p> <p>The unit is having full-fledged Occupational Health Centre in the Factory and IFFCO-Kandla is also ISO 45001:2018 certified company.</p>
13.	Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual	<p>Complied</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances
	<p>reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.</p>	<p>Yes, periodical training on various safety & health aspects of chemicals handling is being imparted to all employees.</p> <p>Details with photographs of training provided to employees is attached as Annexure-XIII.</p>
14.	<p>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.</p>	<p><u>Fire Protection Measures Adopted in Plant:</u></p> <ul style="list-style-type: none"> • Full Fledged Fire & Safety department with professionally qualified, experienced & skilled staff. • Fire hydrant system network of around 11000 meter with 8.0 kg/cm² pressure having fire pumps working on auto is provided all over the plant & around the ammonia storage tanks to create water curtain in case of Ammonia leakage. The Water curtain can prevent the spreading of Ammonia in surrounding area of plant premises. Water monitors, water sprinklers system, contaminated type safety showers and eye washer are provided around the hazardous area. Water curtain system is provided in front of Control Room to prevent entering of Ammonia in control room. • There are four numbers of Fire Pumps each of capacity of 273 m³/hr and Jockey Pump of 15 m³/hr capacity and 291 Nos. of Fire Hydrant and 15 Nos. of water monitors provided in fire hydrant network all over the plant. • DCP Fire Extinguishers & CO₂ Fire Extinguishers provided in the plant area for immediate fire-fighting. • Smoke Detector system also provided in high hazard area of the plant. • Ammonia Sensors provided in Ammonia Storage & six Production streams. • Two multipurpose foam tenders and two emergency jeeps with latest Fire-fighting equipment and with experienced & trained Fire staff are always ready to tackle any emergency and they are present round the clock at Fire Control Room. • PPE for workmen.

Sr. No.	Environmental Conditions /Safeguards	Compliances
15.	The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flameproof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be provided with vent condensers with chilled brine circulation.	Not Applicable, as there is no usage of solvent in the manufacturing process in the plant.
16.	<p>The PP shall undertake waste minimization measures as below</p> <p>(a) Metering and control of quantities of active ingredients to minimize waste;</p> <p>(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</p> <p>(c) Use of automated filling to minimize spillage.</p> <p>(d) Use of Close Feed system into batch reactors.</p> <p>(e) Venting equipment through vapor recovery system.</p> <p>(f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.</p>	<p>Complied</p> <p>(a) Specific vessels / tanks have Process & Instrument control valves for controlled use of active ingredients/chemicals and to minimize the waste.</p> <p>(b) Industrial wastewater along with effluent generated from the plant are being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant.</p> <p>(c) IFFCO Kandla unit is having automatic weighing & filling system in product handling plant to minimize spillage.</p> <p>(d) IFFCO Kandla is having close feed system in Pre-Neutralizer tanks at four streams of Kandla plant and Pipe reactors at two streams of Kandla plant.</p> <p>(e) APCS comprising of Cyclone and wet venturi scrubber is provided to each air pollution source at IFFCO Kandla for recovery of escaped NH₃ and particulate matter</p> <p>(f) High-pressure hoses are used for cleaning purposes and to reduce wastewater generation.</p>
17.	The activities and the action plan proposed by the project proponent to	Complied

Sr. No.	Environmental Conditions /Safeguards	Compliances
	address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.	

Part B - GENERAL CONDITIONS:

Sr. No.	Environmental Conditions /Safeguards	Compliances
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 and complied.
2.	The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans- Boundary Movement) Rules, 2016 and other rules notified under various Acts.	<p>Noted and complied.</p> <p>All relevant clauses of the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 are complied.</p> <p>IFFCO Kandla is having full-fledged dedicated Fire & Safety Department with qualified and experienced Fire Staff available round the clock to control/mitigate any emergency.</p> <p>Authorization from GPCB has been obtained for collection, treatment, storage and disposal of hazardous waste vide authorization no. AWH- 113047 dated 14.03.2024 and valid upto 20.10.2028.</p> <p>Rules & guidelines under MSIHC Rules are strictly followed in the plant.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances
3.	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy Conservation and environment betterment.	<p>Complied</p> <p>All the energy source for lighting purpose are LED based.</p>
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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<p>Complied</p> <p>All Machinery Equipment are such that noise levels are within permissible limits. Noise at the boundary of the plant is maintained less than 75 dB(A) during daytime and 70 dB(A) during nighttime. Noise monitoring is being carried out periodically. Latest Noise monitoring report is attached as Annexure-XIV.</p>
5.	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	<p>Complied</p> <p>Eco-development is carried out by IFFCO through Indian Farm Forestry Development Cooperative Limited (IFFDC) by developing wastelands for tree plantation. Afforestation in about 29,420 hectares has been achieved in various states.</p> <p>Community welfare measures are undertaken at IFFCO through its Integrated Rural Development Program (IRDP) of village adoption for overall socio-economic development in rural areas. Villages in various states have been covered under this program. Eco development and community welfare is carried out at the corporate level in IFFCO.</p>
6.	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.	<p>Noted and complied.</p> <p>Adequate funds to implement conditions stipulated by MoEF and SPCB have been provided for environmental protection. These funds are not diverted for any other purpose.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances
7.	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.	<p>Complied</p> <p>There were no suggestions/representations received from the concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO while processing the proposal. However, one copy each of Environment clearance letter has been given to District Collector, District Industry centre Bhuj, District Development Officer Bhuj, Taluka Development Officer Gandhidham, and IRO Gandhinagar. Copies of receipt of acknowledgement are attached as Annexure-XV.</p>
8.	The project proponent shall also upload/submit six monthly reports on PARIVESH Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	<p>Noted.</p> <p>Six monthly compliance report is being regularly uploaded to the MoEF&CC/SPCB/CPCB. Same shall be uploaded on company website.</p>
9.	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 Integrated Regional Office of MoEF&CC by e-mail.	<p>Complied</p> <p>The environmental statement in Form-V has been submitted to GPCB and the same is uploaded on IFFCO's website www.iffco.in. A copy of the same has been sent to IRO-Gandhinagar by e-mail.</p> <p>Form-V for the year 2023-24 is attached as Annexure-XVI.</p>

Sr. No.	Environmental Conditions /Safeguards	Compliances															
10.	<p>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.</p>	<p>Complied</p> <p>The matter has been advertised in local newspapers in Gujarati and English for information to the public. Details of newspaper with publishing date is given in the table below:</p> <table border="1" data-bbox="906 546 1514 887"> <thead> <tr> <th></th> <th>Newspaper</th> <th>Publishing Date</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Gujarati Newspaper</td> <td>Kutch Uday</td> <td>01.03.2024</td> </tr> <tr> <td>Gujarat Samachar</td> <td>02.03.2024</td> </tr> <tr> <td>Kutch Mitra</td> <td>02.03.2024</td> </tr> <tr> <td rowspan="2">English Newspaper</td> <td>Times of India</td> <td>02.03.2024</td> </tr> <tr> <td>Indian Express</td> <td>02.03.2024</td> </tr> </tbody> </table> <p>Copy of the same has been forwarded to regional office of the Ministry. Copy of newspaper clippings is attached as Annexure-XVII.</p>		Newspaper	Publishing Date	Gujarati Newspaper	Kutch Uday	01.03.2024	Gujarat Samachar	02.03.2024	Kutch Mitra	02.03.2024	English Newspaper	Times of India	02.03.2024	Indian Express	02.03.2024
	Newspaper	Publishing Date															
Gujarati Newspaper	Kutch Uday	01.03.2024															
	Gujarat Samachar	02.03.2024															
	Kutch Mitra	02.03.2024															
English Newspaper	Times of India	02.03.2024															
	Indian Express	02.03.2024															
11.	<p>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.</p>	<p>Noted and complied.</p> <p>Presently, construction of proposed expansion project has not been started.</p>															
12.	<p>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.</p>	<p>Noted.</p>															

List of Annexures

Sr. No.	Annexure	Description
1.	Annexure I	Environmental Clearance Letter
2.	Annexure II	Latest CTO
3.	Annexure III	Exemption letter for Zinc Sulphate
4.	Annexure IV	Amount spent towards EMC Cell
5.	Annexure V	Amount spent towards EMP
6.	Annexure VI	Proof of Implementation of EMP activities
7.	Annexure VII	Photographs showing CPCB server data transfer
8.	Annexure VIII	Latest Test Reports of Stack
9.	Annexure IX	Photographs of Green Area provided in plant and Township
10.	Annexure X(a)	Onsite Emergency Plan
11.	Annexure X(b)	Latest mock drill report
12.	Annexure XI	Work Zone Monitoring Reports
13.	Annexure XII	Details of Toxic/Hazardous Raw materials
14.	Annexure XIII	Latest refresher training report with Photographs
15.	Annexure XIV	Latest Noise Monitoring Report
16.	Annexure XV	Information to Local Bodies
17.	Annexure XVI	Form V for the year 2023-24
18.	Annexure XVII	Newspaper clipping for advertisement given.



File No: J-11011/202/2009-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 27/02/2024



To,

Sh Arun Kumar Sharma
 INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
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Subject: Grant of prior Environmental Clearance (EC) for **Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) under the provision of the EIA Notification 2006 -regarding.**

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/GJ/IND3/437120/2023 dated 11/09/2023 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1904GJ5461768N
(ii) File No.	J-11011/202/2009-IA.II(I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	5(a) Chemical fertilizers
(vi) Sector	Industrial Projects - 3
(vii) Name of Project	Expansion of Existing Fertilizer Plant for Manufacturing of Nano-Fertilizer (Nano-DAP), Kandla Unit
(viii) Name of Company/Organization	INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
(ix) Location of Project (District, State)	KACHCHH, GUJARAT
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for the Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO).

4. The project/activity is covered under Category 'A' of Item 5(a) Chemical Fertilizer (excluding formulations of Schedule of EIA Notification, 2006 (as amended).

5. The **Standard ToR** was granted by the Ministry, vide letter no. J-11011/202/2009-IA. II (I) dated **5.11.2022**. The PP applied for Environment Clearance in the Common Application Form and submitted EIA/EMP Report and other documents. The PP in the Form reported that it is an **Expansion case**.

6. The proposal was placed in 66th EAC meeting on 26th September, 2023, However PP vide e-mail dated 12.10.2023 requested for correction in the Minutes of 66th EAC meeting held on 26th September, 2023. The case was then taken up in the EAC meeting held on 4-5 December, 2023. The Committee deferred the proposal for want of additional information i.e. details of CRZ clearance obtained for the existing project for land area 70.54 ha, if any. Thereafter, upon receipt of the additional information, the case was taken up in 73rd EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR) MEETING HELD ON 16th-17th JANUARY, 2024.

7. PP along with accredited Consultant, M/s EQMS Global Pvt. Ltd (NABET Accreditation No.: NABET/EIA/2225/RA 0303 Valid Upto 23.11.2025)] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:

8. The PP reported that the **existing land area** is 704153.64 sq.m. **Proposed expansion is planned within the existing premises**. The details of products to be manufactured are as follows:

S. No.	Product	As per CTO (MT/Annum)	Proposed/ Additional (MT/Annum)	After Expansion (MT/Annum)	Remarks
1	NPK 10:26:26*	Fortified 0.5% Zn in NPK/DAP of Total Capacity of 10 Lac MT of P2O5	0	Fortified 0.5% Zn in NPK/DAP of Total Capacity of 10 Lac MT of P2O5	No Change
2	NPK 12:32:16*				
3	DAP 18:46*				
4	MAP 11:52*				
5	Urea Phosphate (17:44)	15000 MT of Bulk Capacity	0	15000 MT of Bulk Capacity	No Change
6	NPK Products by mixing sulphate of potash				
7	NPK 19:19:19 NPK 12:30:15 NPK 12:32:14 NPK 18:18:18 (By Mixing of solid raw materials in rotary mixers only)	15000 MT	0	15000 MT	No Change
8	Zinc Sulphate Monohydrate	30000 MT of Bulk Capacity	0	30000 MT of Bulk Capacity	No Change
9	Nano-DAP	0	36500 kL per year	36500 kL per year	New Product

**Different grades of NPK/DAP/MAP/NP shall be manufactured in the plant.*

9. The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 however, one Show Cause Notice has been issued by the GPCB vide letter dated 3.11.2018 and the reply for the same has been submitted on 14.11.2018 and 6.2.2019. CCA and its amendment were issued by GPCB on 18.12.2018 and 23.3.2022 respectively.

10. The PP reported that the **Ministry had issued EC earlier vide letter no. J-11011/202/2009-IA. II(I) dated 13th May, 2009** to the Fertilizer Plant for manufacturing Water Soluble Fertilizers in favour of M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO).

11. The PP reported that the **Certified Compliance Report** of the existing EC was issued by IRO Gandhinagar vide letter no. J-11/8-2022-IROGNR dated 28.08.2023 based on the site inspection conducted on 18.08.2023 wherein, out of 35 condition, it may be seen that 22 complied, 3 partly complied, 3 agreed to comply by the PP, 6 noted by the unit whereas ` condition can't be ascertained. Action taken report for the partly complied conditions has been submitted to IRO Gandhinagar vide letter dated 02.9.2023.

12. The PP reported that there are four Mangroves Patches (0.7km, 3.50 km, 4.61 km & 7.32 km) located within 10 km of the project and there are six water bodies in 10 Km radius i.e., Kandla Creek (10 Meters, E), Phang Creek (3.50 km, N), Sara Creek (4.91 km, N), Nakti Creek (5.43 km, W), Sanu Creek (6.50 km, N), Sakar River (8.06 km, SW). Four Schedule-I species i.e Indian Crested Porcupine, Indian Rat Snake, Indian Peafowl were observed in the 10 km radius from the proposed project for which **conservation plan** has been prepared and submitted to CWW on 8.7.2023.

13. The PP reported that **Ambient air quality** monitoring was carried out at Seven (7) locations Oct-2020-Dec,2020. The baseline data indicates that ranges of concentrations as: PM10 (41-88 $\mu\text{g}/\text{m}^3$), PM2.5 (22-48 $\mu\text{g}/\text{m}^3$), SO2 (5.6- 14.4 $\mu\text{g}/\text{m}^3$) and NOx (8.4-25.6 $\mu\text{g}/\text{m}^3$). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The manufacturing process of nano-fertilizer plant is a closed loop reactor vessel setup with regulated control. Hence, nano-fertilizers plant will not contribute to air emissions. There shall be no gaseous emission from Nano Fertilizer Unit. No additional process Stack is proposed in expansion and there shall be no gaseous emission from Nano Fertilizer Unit.

14. Noise- Ambient noise level monitoring was done at eight (8) locations during study period. Noise level values ranged from 52.8 to 63.2 dB(A) during day and 40.1 to 54.6 dB(A) during night-time. The noise levels observed in the project site and study are within prescribed limits except the location Khari Road & KASEZ Township. **Groundwater** quality monitoring was done at eight (8) locations during the study period. The pH ranged between 7.40 to 7.76, which are well within the specified standard of 6.5 to 8.5 limit. Total hardness levels were recorded in the range between 214 to 432 mg/l that falls within the permissible limit of 600 mg/l. Total dissolved solids were recorded in the range of 382 to 1496 mg/l that falls within permissible limits of 2000 mg/l. Chloride levels were recorded between 68 to 412 mg/l that falls within the range of permissible limit i.e., 1000 mg/l. Sulphate levels were observed in the range of 26 to 230 mg/l and were within the acceptable limit i.e., 400 mg/l. Bacteriological studies reveal that no coliform bacteria are present in the samples. The heavy metal contents were observed to be in below detectable limits. Parameters for toxic substances were recorded within the permissible limits. All physical and general parameters were observed within the permissible limit as per IS10500:2012.

15. Surface water quality monitoring was done at five (5) locations during study period. Comparing the values of pH, DO, BOD and Total Coliforms with 'Use based classification of surface waters' published by Central Pollution Control Board; the analyzed surface waters is moderately polluted and classified as "**below 'E'** **Soil quality** monitoring was done at Eight (8) locations during the study period. As per the grain size distribution the percentage of Sand in all sampled soil was found varied from 72.3% to 85.2%, Silt varied from 8.2 to 15.7% and Clay from 6.6% to 20.2% during post-Monsoon season. Thus, the soil texture is Sandy Loam. The Organic Carbon content of sampled soil during study varied from 0.32% to 0.81%, thereby implying that soils are very low to high organic content. Available nitrogen content in the surface soils ranges between 79kg/ha to 128 kg/ha thereby indicating that soils are Low available nitrogen content. Available phosphorus content ranges between 7.1 kg/ha to 16.2 kg/ha thereby indicating that soils are low to medium in available phosphorus. Available potassiums in these soils range between 92 kg/ha to 292 kg/ha thereby indicating that the soils are low to high in potassium content.

16. The PP reported that the existing freshwater requirement of the plant is 1132.5 KLD (Industrial- 902.5 KLD; Domestic- 230 KLD) being sourced from Gujarat Water Supply & Sewerage Board (GWSSB). **The freshwater requirement of the project after expansion will be 1522.5 KLD (Industrial: 1281.5 KLD; Domestic: 241 KLD).** Under existing phase, Industrial wastewater along with effluent generated from the plant (124 KLD) is being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant. Hence, the plant is Zero liquid effluent

discharge (ZLD) based plant. Domestic Sewage (200 KLD) is treated in Sewage Treatment Plant and the treated effluent is being used for horticultural purposes in the plant. Under proposed Nano-DAP fertilizer plant, wastewater generation from plant will be 35 KLD (Process & Washing- 2 KLD; Cooling Tower Blow Down- 24 KLD & Domestic Sewage- 9 KLD). Process effluent and cooling tower blow down will be discharged to Effluent Collection Pit that will be recycled in NPK-II Plant. Domestic sewage will be treated in proposed Sewage Treatment Plant (Capacity-10 KLD). Treated water will be reused for horticultural purposes. **Total wastewater generation after expansion will be 359 KLD (Industrial Effluent: 150 KLD; Domestic Sewage: 209 KLD). Industrial Effluent will be Collected in Effluent Collection Pit from where it shall be recycled to scrubber area of NPK-II plant. Domestic sewage will be treated in STP's (Existing- 250 KLD & Proposed-10 KLD). STP treated water will be reused within the plant for horticultural purposes.**

17. The existing **power requirement** of the project is 15.5 MVA which is supplied by PGVCL (formerly known as Gujarat Electricity Board- GEB). No additional power required for the expansion. The existing unit has 2 DG set of 2x1010 KVA, after proposed expansion additional DG set of 1 x 300 KVA will be installed as power backup to be used during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.

18. The existing unit has one coal fired boiler of 14 TPH & one FO based boiler of 16 TPH. ESP with a stack of height of 51 m already installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the existing boilers. No additional boiler will be installed.

FUEL REQUIREMENTS				
Particular	Unit	As per CTO	Proposed	Total after Expansion
Coal	MT/hr	12.96	0	12.96
Low Sulfur Furnace Oil*	kL/day	53	0	53

Low Sulfur Furnace Oil is used only when Hot Air Generator (HAG) for any train/Coal fired Boiler is under Preventive Maintenance. The Low Sulfur Furnace Oil consumption data is given assuming full load. Fuel for stand-by boiler will be Diesel/Natural Gas. Being a stand-by boiler, fuel requirement will be minimum (It will be operated when whole plant required to be taken in shut-down).

19. Details of Process Emissions Generation and its Management:

S. No	Stack	Stack Height	APCS	Velocity	Temp.	Flow (m ³ /hr)	Type of Pollutant
		(m)		(m/s)	(°C)		
Existing							
Utilities							
1.	Boiler (Coal Based) – 14 TPH	51 m	ESP (Common Stack)	08-10	120-130	30000	PM, SO ₂ , Nox
2.	Boiler (FO Based) – 16 TPH (standby)	(Common Stack)					
3.	Indirect Coal Fired Hot Air Generator for 2 Nos. providing hot air to Zinc Sulphate Plant	41 m common stock for Both HAG	ESP individually for each HAG	9-12	100-110	35000	PM, SO ₂ , Nox
4.	DG Sets (2 x 1010 kVA)	Stack height: 28 m Stack Dia: 0.35 m	-	-	-	-	PM, SO ₂ , Nox
Process Emission							
5.	Reaction Vessel- Zinc Sulphate Plant	23	Scrubber	08-10	60-70	8000	Acid Mist
6.	Spray Dryer-1	30	Quadruple Cyclone with Scrubber	10-12	50-60	80900	PM
7.	Spray Dryer-2	30	Quadruple	10-12	50-61	80900	PM

			Cyclone with Scrubber				
8.	6 Nos. Direct Coal Fired Hot Air Generator for providing Hot Air to NPK/DAP Plant (A, B, C, D, E & F Trains)	41 m for each train	Cyclone with wet scrubber	12-18	50-60	A Train: 266400 B Train: 266400 C Train: 283400 D Train: 283400 E Train: 332810 F Train: 332810	PM, NH ₃ , HF
9.	De-dusting System Unit 2 & 3	31 m	Scrubber	9-10	45-50	45000	PM
10.	De-dusting System Unit (3 nos.)	41 m	Scrubber	9-10	45-50	30000	PM

PROPOSED

1.	DG Set (1x300 kVA)	4 m	Stack Height	-	-	-	PM, SO ₂ , Nox
1.	6 TPH (LP Steam Boiler as standby boiler)	30 m					PM, SO ₂ , Nox

20. Details of Solid Waste/ Hazardous Waste Generation and its Management:

Sr. No	Type of waste	Category	Generation (MTPA)			Disposal Method
			Existing	Proposed	Total after Expansion	
Hazardous Waste						
1	Used/spent oil	5.1	10	0	10	Reused in bagging machine for lubrication of slat conveyors or Collection, storage and selling out to registered re-cycler.
2	Chemical Sludge out of Zinc Sulphate	I-6.1	1650	0	1650	Collection, storage and selling out to registered re-cycler only.
3	Zinc Ash (Contain 75% in Container 1)	IV	14550	0	14550	Receiving storage and Recycling of ash as raw material in manufacturing of Zinc Sulphate Monohydrate
4	Plastic waste generated include paint buckets, chemical drums, HDPE/LDPE Tarpaulin, discarded BOPP bags etc.	33.1	185	0	185	Plastic waste is being disposed to recycler.
5	Discarded Barrels/ Containers/ Liners contaminated with hazardous chemicals / wastes	33.1	0	15000 No. of HDPE Drums	15000 No. of HDPE Drums	Collection, Storage, Decontamination and sale to authorized facility/ authorized recycler.
6	Bags contaminated with hazardous chemicals / wastes	33.1	0	150 MT/Year HDPE Bags	150 MT/Year HDPE Bags	Collection, Storage, and sale to authorized recycler
Non-Hazardous/Industrial						
7	Ash from coal Based boiler	-	3200	0	3200	Used as filler in the plant
8	Scrap metals	-	1200	0	1200	Sent to recycler

21. The Budget earmarked towards the **Environment Management Plan (EMP)** is 1552.55 Lakhs (capital) and the Recurring Cost (operation and maintenance) will be about 3359.13 lakhs per annum. Industry proposes to allocate Rs. 1 Crore towards Corporate Social Responsibility.

22. The PP reported that in latest Environmental Clearance vide File No. J-11011/202/2009-IA. II(I) dated 13.05.2009, it was instructed that “the company shall develop the green belt in 33% area, out of total area to mitigate the effect of fugitive emissions and noise as per the guidelines CPCB”. The IFFCO plant is located beside the Kandla creek. High salinity and sea water ingression in the project area has been noticed due to its closeness to Kandla creek. Saltwater intrusion has occurred in coastal aquifers at some areas of the Kandla including IFFCO Plant area. The soil of the plant area is highly saline. Hence the greenbelt development in the project area is a very tough task. Because of the high saline soil greenbelt development is not easy and the tree species could not flourish in the plant site. However, after subsequent efforts, IFFCO Kandla developed 44864 m² (4.45 ha) of green area in the existing premises. There are approx. 12210 no. of trees in the plant. Unable to enhance further green belt in the plant due to environmental limitations, IFFCO Kandla had then carried out mangrove plantation of 200 hectare in the nearest suitable stretch of Kachchh coast to comply environmental clearance for IKLL Jetty which is an integral part of IFFCO Kandla Complex. IFFCO had assigned GUIDE (Gujarat Institute of Desert Ecology) to carry out mangrove plantations on sites stretching out on Sat Saida Bet that is located nearby project site. The nearest mangrove plantation sites are located 3.75 km, N from the project site. **Hence, IFFCO had planted approx. 200 Ha. of mangrove plantation i.e., approximately 2.84 times of plot area (70.415364 Ha.) of IFFCO Kandla Complex.** Moreover, IFFCO has also developed the greenbelt on receptor-oriented approach as per CPCB greenbelt development guideline, March 2000 outside the plant premises to meet the required green belt due to adverse condition for greenbelt development within plant. Such as IFFCO has developed 30.35 ha (75 Acres) of green area in the IFFCO Udaynagar Township which is located approx. 10 kms (aerial) away from the project site where approx. 106986 no. of trees have been developed. Besides that, IFFCO has also developed 2.02 ha (5 Acres) green area in Gandhidham Town. Additionally, IFFCO has carried out green belt development in Pantiya village of Kutch District with approx. 11372 no. of trees in the village (96 Acres Area) under CORDET. In numerous efforts have been made for green belt development in other areas also. IFFCO being a conscientious organization regarding environment, the industry has still proposed for development of additional greenbelt admeasuring 1.10 Ha. area within the plant using Miyawaki Technique under which 33201 no. of trees will be planted. IFFCO has planned for a contribution of Rs. 1.952 Crores for the same.

23. The PP reported that the **Public Hearing** for the proposed project has been conducted by the State Pollution Control Board on 09.05.2023. The Main issues raised during the public hearing are related to Education, air pollution, CER activities and Public was in favor of proposed plant. Details of Public hearing are given below:

S.No.	Objections/Suggestions/ Participant	Questions raised by	Comments made by Project Proponent	Action Plan
1.	Education		Yes, we will continue to do what madam said for help.	IRDP/CER (EDUCATION): IFFCO regularly contributes for education and related facilities in nearby areas under its IRDP Programme. In year 2021-22, IFFCO contributed approx. Rs. 5.14 Lakhs and In year 2022-23 Rs. 8.79 Lakhs for distribution of school tables, green boards, computers, furniture, benches etc. to nearby schools. In the next 3 years, the industry shall contribute Rs. 20 Lakhs for infrastructural/repair work in schools, construction of classrooms & toilets, community halls etc.
1.	Air Pollution		Whatever	AIR POLLUTION: Adequate

		development work is done from our side, we will do it further, Thank you.	APCM like Bag Filter, ESP, Scrubber Cyclone etc. has been installed to control air emissions from plant. The industry maintains emissions within permissible limits prescribed by GPCB. Under proposed expansion, the manufacturing process of nano-fertilizer plant is a closed loop reactor vessel setup with regulated control. Hence, nano-fertilizers plant will not contribute to air emissions. CER (GREEN BELT): Industry has done enormous green belt plantation outside the plant complex till date. In year 2020-21, IFFCO spent Rs. 23,600 in greenbelt development in Customs House, Kandla. Under proposed expansion, IFFCO will contribute Rs. 35 Lakhs in next 3 years. CER (COVID RELIEF): In year 2020-21, IFFCO spent approx. Rs. 10.02 Lakhs for food & ration supplies during COVID.
1.	Deputy collector Mr. Desai Sir and the Regional Officer of pollution department and everyone, as far as pollution is concerned, there is no pollution here, so there is no population here, so there is very little pollution. It should not be brought because first of all it is urea, why did we bring this Nano urea of IFFCO so that it does not harm the mother earth where 50 kg had to be put, then we get result even in half of kg. Even in agriculture, there are many chemicals, this company has replaced many biological Bacteria, where the mother land of India is now polluted and we are trapped, agriculture is also trapped and people are also trapped in eating. The efforts of this IFFCO organization to liberate they are commendable. and all kinds of biological bacteria are also found here with the farmers, if such co-operative organization will cooperate within this country, then the health of the people will also improve and at the same time your mother land will also alive. You will carefully check on such units. I will request the pollution board to do a thorough investigation on the units where there is more pollution and damage to the agriculture. I also request my journalist friends, this is our country, and our future generation also have to live on this mother land or country. Let us think that in coming days we should make efforts so that our generation does not suffer. Bharat Mata Ki Jai...	Thank You.	-
1.	CER activities	Thank You.	CER (Health Care): Under its IRDP, IFFCO has supplied 35 no.

			of medical oxygen cylinders to Arya Samaj, Gandhidham and Physiotherapy Unit to nearby hospital located in Gandhidham. There is one Government Hospital located nearby project at 1.96 km in SW direction. The industry shall contribute for improvement in infrastructural & transportation facilities in the government hospital for better access to affected people. Under proposed expansion, the industry shall contribute approx. Rs. 20 Lakhs in the next 3 years for healthcare facilities. Facilities for treatment of affected people within the Kandla Complex are covered within OHC & IFFCO Kandla Township Hospital.
1.	Namskar sir, my name is Navalal Budhwari. I live in the neighbouring village Mithapur. Which is right next to IFFCO. There is a school facility and everything is good, the road is so bad, that we leave there now, the condition of the car will be bad, the road is bad for a couple of kilometres, the second monsoon comes and even without monsoon, water enters the house. When the tides comes in the sea. There is a big tide on the 15th day, then the water comes in our house, there will be almost one or two houses left that water will not enter it. It is big problem that water comes even at 2.30 am and also during the day. We have presented in IFFCO and we have presented the construction of embankment and our presentation of the road is all that we have to say.	As per proposal presented by you industry will always do what we can do for your people and our surrounding villages. Thank you.	The industry shall contact local authorities for repairment of roads and drainage networks in surrounding areas of IFFCO Kandla Complex. IFFCO shall contribute approx. Rs. 10 Lakhs in next 3 years for such activities after taking consultation with local authorities.
1.	Sir, just introduced to you. It has already been presented that we have a sea hole which all the water is combining from the sea, that it cannot stay. So, sir help us. Our children do not have slippers on their feet when they leave the house. Why wear slippers if they are muddy? Sir.		
1.	Namskar, My name is Panchal Dharmendra Hareshbhai. I am a farmer. Village Chobari. This time I gave a coat of DAP as well as Nano DAP and the result is very good like DAP and the cost is reduced and the result is better. The reduction of chemicals in the soil has greatly benefited the farmer.	-	-
1.	Piyushbhai Vora, village Gandhidham. Sir, the hospital that I spoke to, the company gives a reply to this matter, if it will come and do such a good job, please reply to me. You must also realize that there are three railway crossings on the road and an ambulance comes from ten kilometres away. It takes me one to one and a half hours to reach home because of the railway crossing and you also know that it is very difficult for people to come and go if there is	Response by the project Proponent: Thank you for your request, which is within our scope. IFFCO is an organization, some of them own	CER (Health Care): Under its IRDP, IFFCO has supplied 35 no. of medical oxygen cylinders to Arya Samaj, Gandhidham and Physiotherapy Unit to nearby hospital located in Gandhidham. There is one Government Hospital located nearby project at

<p>an accident or someone gets seriously ill. The hospital is 10 KM away. There is no other hospital you will know all this. So, that's what I'm saying prepare whole map and a hospital should be built. This is my humble request.</p>	<p>activities, for the service of farmers we will need what can be done with the government. DPT is also here, so the authority under which it is, I think that if you request from them too, then it will be fine. Thank you.</p> <p>Thank you. As you must have seen that the government is building a very good flyover and bridge here, so whatever the problem is, we think, it will be removed very soon and the rest of what you are saying, IFFCO always ready to serve. Thank You.</p>	<p>1.96 km in SW direction. The industry shall contribute for improvement in infrastructural & transportation facilities in the government hospital for better access to affected people. Under proposed expansion, the industry shall contribute approx. Rs. 20 Lakhs in the next 3 years for healthcare facilities. Facilities for treatment of affected people within the Kandla Complex are covered within OHC & IFFCO Kandla Township Hospital.</p>
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24. The PP proposed to set up an **Environment Management Cell (EMC)** by engaging Unit head- HOD (Technical) – HOD Process Engineering- HOS (Laboratory) for the functioning of EMC.

25. The PP reported that considering a 10-year-old Greenbelt of 33201 trees and assuming the dia and tree height at the age of 10 years as per the standards, the total Carbon sequestered per year by the proposed greenbelt at its initial age will be 1192.14 tons per year.

26. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.

27. The estimated cost for the proposed project is **Rs. 325 Crores**. Total Employment will be 2404 persons as direct after expansion.

28. Deliberations by the EAC:

The EAC constituted under the provisions of the EIA Notification, 2006 comprising expert members /domain experts in various fields, examined the proposal submitted by the PP in desired format along with the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the PP.

The EAC noted that the PP has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the PP.

The EAC noted that the EIA reports are in compliance with the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during the implementation also of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The expert members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent 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. The PP shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

29. The EAC, after detailed deliberations, **recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions : -**

Specific Conditions:

1. A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the. PP shall engage Unit head- HOD (Technical) – HOD Process Engineering- HOS (Laboratory). In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
2. 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. The budget propose under EMP is 1552.55 Lakhs (Capital cost) and Rs. 3359.13 lakhs per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
3. As proposed Low Sulfur Furnace Oil/ coal shall be used as a primary fuel. The phasing out of coal may be explored.
4. The PP reported that the existing freshwater requirement of the plant is 1132.5 KLD (Industrial- 902.5 KLD; Domestic- 230 KLD) being sourced from Gujarat Water Supply & Sewerage Board (GWSSB). **The freshwater requirement of the project after expansion will be 1522.5 KLD (Industrial: 1281.5 KLD; Domestic: 241 KLD).** The PP shall ensure that water supply should not be above the permissible limit and fresh water shall be withdrawn only after obtaining requisite permission from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
5. Under existing phase, Industrial wastewater along with effluent generated from the plant (124 KLD) is being collected in the Central Sump of NPK/DAP Plant from where it is completely recycled/consumed in the scrubber process of NPK/DAP plant because NPK/DAP plant is negative water balance plant. Hence, the plant is Zero liquid effluent discharge (ZLD) based plant. Domestic Sewage (200 KLD) is treated in Sewage Treatment Plant and the treated effluent is being used for horticultural purposes in the plant. Under proposed Nano-DAP fertilizer plant, wastewater generation from plant will be 35 KLD (Process & Washing- 2 KLD; Cooling Tower Blow Down- 24 KLD & Domestic Sewage- 9 KLD). Process effluent and cooling tower blow down will be discharged to Effluent Collection Pit that will

be scrubbed in NPK-II Plant. Domestic sewage will be treated in proposed Sewage Treatment Plant (Capacity-10 KLD). Treated water will be reused for horticultural purposes. **Total wastewater generation after expansion will be 359 KLD (Industrial Effluent: 150 KLD; Domestic Sewage: 209 KLD). Industrial Effluent will be Collected in Effluent Collection Pit from where it shall be recycled to scrubber area of NPK-II plant. Domestic sewage will be treated in STP's (Existing- 250 KLD & Proposed-10 KLD). STP treated water will be reused within the plant for horticultural purposes.**

6. No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
7. The project proponent shall comply with the environment norms for Chemical Fertilizer Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 1607 (E), dated 29.12.2017 under the provisions of the Environment (Protection) Rules, 1986.
8. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
9. All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.
10. The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
11. The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
12. The occupational health centre for surveillance of the worker's health shall be set up. 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.
13. Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
14. 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.
15. The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flameproof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be provided with vent condensers with chilled brine circulation.
16. The PP 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. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.
17. The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

General Conditions:

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.

2. The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
 3. The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
 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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
 5. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
 6. 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.
 7. 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.
 8. The project proponent shall also upload/submit six monthly reports on PARIVESH Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.
 9. 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 Integrated Regional Office of MoEF&CC by e-mail.
 10. 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.
 11. 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.
 12. 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.
30. Based on the recommendations made by EAC (Industry-3) in its EAC meetings dated 26th Sept 2023, 4-5 Dec 2023 and 16-17 Jan 2024, Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project to set up **“Proposed addition of Nano-Fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO)”** under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the Specific and General terms and conditions as mentioned at Annexure-1. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
31. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

32. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

33. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

34. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

35. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

36. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

37. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

38. 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein

This issues with the approval of the Competent Authority.

Copy To

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010 (Gujarat)
2. The Deputy Director General of Forests (C) Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A-Wing – 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar - 382010
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, District Kutch, Gujarat.
7. Guard File/Monitoring File/PARIVESH

Additional EC Conditions

N/A

Signature Not Verified

Digitally Signed by : Mr A N Singh
Member Secretary, MoEFCC (EC)

Date: 27/02/2024



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

By R.P.A.D

ANNEXURE-II

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous and Other Waste (Management and Transboundary) Rules, 2016 framed under the Environmental (Protection) Act-1986.

And whereas Board has received consolidated consent application inward No. 286523 dated 06/09/2023 for the **Renewal of Consolidated Consent and Authorization (CC&A)** of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:

(Under the provisions /rules of the aforesaid environmental acts)

To,

M/s. IFFCO Ltd. (ID-17878),
Old Kandla, Kandla unit,
Tal: Gandhidham,
Dist: Kutch - 370 210.

1. Consent Order No. AWH-133047 Date of issue: 14/03/2024.

2. The consents shall be valid upto 20/10/2028 for the use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacturing of the following items/ products:

SR. NO.	PRODUCT	TOTAL CAPACITY
1.	NPK: 10: 26: 26:	Fortified 0.5% Zn in NPK/ DAP of total capacity of 10 Lac MT of P2O5
2.	NPK: 12: 32: 16:	
3.	DAP: 18: 46	
4.	MAP: 11: 52	
5.	Urea phosphate: 17: 44	Total 15,000 MT (by mixing of solid raw material in rotary mixers only)
6.	NPK: 13: 19: 19	
7.	NPK: 12: 30: 15	
8.	NPK: 12: 32: 14	
9.	NPK: 18: 18: 18:	
10.	Zinc Sulphate Mono Hydrate	3000 MT of bulk capacity

Subject to specific condition:

1. Industry shall comply with all conditions of Environment Clearance issued by MoEF & CC, New Delhi vide order no. J-11011/202/2009-IA II (I) dated 13/05/2009.
2. Industry shall utilize fresh H2SO4 for the manufacturing of the zinc sulphate.
3. Industry shall submit Hazardous Waste annual return regularly.
4. Industry shall adopt & regularly use the online manifest system for procurement & disposal of Hazardous Waste.

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Website : <https://gpcb.gujarat.gov.in>

5. There shall not be only mixing of raw material only there shall not be any specific chemicals reaction as well as no generation of gaseous emission & not any fuel is consumed for addition products.
6. Industry shall comply with CPCB guidelines for environmentally sound recycle of Hazardous Waste, 2010.
7. Industry shall not withdrawal ground water without prior NOC of CGWA as per order of Hon. National Green Tribunal.
8. Unit shall obtain fresh water from valid source have permission of the complete authority.
9. Industry shall strictly comply with the coal handling guideline of the Board.
10. Industry shall provide dedicated storage silo for storage of fly ash & ash shall be dispose off as per fly ash notification 1999 & as amended from time to time.
11. Industry shall dispose of fly ash as per CPCB guideline dated 28/08/2019 maintain complete records of fly ash generation and its disposal.
12. Industry shall take adequate measures to control fugitive emission due to storage, handling & transportation of coal, fly ash & solid waste etc.
13. Industry shall manage Solid Wastes generated from industrial activities as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3(46)).
14. As per Provisions of Rule 18 of Solid Waste Management Rules-2016 you are directed to make an arrangement in Utilities to replace at least five percent (5%) of your solid fuel requirement by 'refused derived fuel'.
15. Industry shall renew Public Liability Insurance Policy time to time & submit a copy of the same to this office.
16. Industry shall comply with PESO permission issued by competent authority and renew PESO permission time to time & submit a copy of the same to this office.
17. Industry shall comply with Manufacturing, Storage and Import of Hazardous Chemicals Rules – 1989 framed under the Environment (Protection) Act-1989 including site notification of competent authority for isolated storage & submit acknowledge copy of onsite emergency plan & third party safety audit report time to time.
18. Industry shall obtain registration with approved EPR action plan as per Plastic Waste Management Rules-2016 & comply with following conditions:
 - a. Industry shall submit a copy of EPR action plan approved by competent authority along with EPR liability for state of Gujarat.
 - b. Submit plan for compliance of the same with complete details regarding collection centers, mode of conveyance & disposal through registered recyclers/ re processors/ co processors.
 - c. Submit quarterly compliance report against EPR liability for Gujarat regularly clearly indicating plastic waste collection centers, mode of transportation and disposal through recycler/ re-processor/ co-processor with all supporting documents.
 - d. Comply with manifest system introduced by this Board. (Available on GPCB website) for the movement of plastic waste within and from State of Gujarat & submit copies of the same with quarterly compliance report.





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- e. Purchase plastic raw material only from manufactures industry having valid registration under plastic rules, maintain its record and submit its report with quarterly compliance.
- f. Maintain complete record about post-consumer waste and in-plant, plastic waste with clearly indicating quantity generated along with acknowledge of re-processor/ recycler about quantity.

3. CONDITIONS UNDER THE WATER ACT:

- 3.1 Source of Water: -GWSSB.
- 3.2 The quantity of the fresh water consumption for industrial purpose shall not exceed 902.5 KL/Day.
- 3.3 The quantity of the fresh water consumption for domestic purpose shall not exceed 230 KL/Day.
- 3.4 The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed 124 KL/Day.
- 3.5 The quantity of domestic waste water shall not exceed 200 KL/Day.
- 3.6 There shall be no industrial effluent discharge from unit, as entire Mother liquor solution shall be recycled or consumed in the main NPK/DAP process plant. Unit shall strict to zero liquid discharge & there shall not be any industrial waste water discharge within or outside premises in any case.
- 3.7 Industry shall provide fixed pipeline with flow meter for the reuse of effluent and maintain its record.
- 3.8 Sewage shall be treated separately to conform to the following standards as per Hon.ble NGT order in the matter of OA No.1069/2018 dated 30/04/2019

PARAMETERS	GPCB NORMS
pH	5.5-9.0
Biochemical Oxygen Demand (BOD)	10 mg/L
Total suspended solids (TSS)	20 mg/L
Chemical Oxygen Demand (COD)	50 mg/L
Nitrogen -Total	10 mg/L
Phosphorous-Total (for discharge into Ponds, Lakes)	1.0 mg/L
Fecal Coliform	Desirable-100 MPN/100ml Permissible -230 MPN/100 ml

- 3.9 Treated domestic effluent conforming to above standard shall be discharged on land for gardening and plantation purpose within premises only. In no case waste water shall be discharged outside premises.
- 3.10 Industry shall provide fixed pipeline network with flow meter for even distribution of treated domestic effluent and maintain its record.
- 3.11 Disposal system for storm water shall be provided separately. In no case storm water & sewage from port facility shall not be discharge into surface water.

4. Conditions under the Air Act-1981:

- 4.1. The following shall be used as a fuel in Boilers & Hag respectively:

Sr. No.	Name of Fuel	Quantity
1	Coal	12.96 MT/Hr

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4.2. The applicant shall install & operate air pollution control system efficiently in order to achieve prescribed norms.

4.3. The flue gas emission through stack attached to Boilers & Hot Air Generators shall conform to the following standards;

Stack No	Stack attached to	Stack height	APCM	Parameter	Permissible limit
1.	Boiler (Coal/ LSHS based) (16 TPH, stand by)	51 m common stack	ESP	PM SO ₂ NO _x	150 mg/NM ³ 100 ppm 50 ppm
2.	Boiler (Coal based) (14 TPH)				
3.	Indirect coal fired Hot air generators (2 nos. for zinc sulphate plant)	41 m common stack	ESP for each stack		

4.4. The process gas emission through stack attached to HAG, dusting units, reaction vessels & spray dryers shall conform to the following standards.

Sr.No	Stack attached to	Stack height	APCM	Parameter	Permissible limit
1.	Hot Air Generator (6 nos., direct coal fired) at NPK/DAP units) (A,B,C, D, E & F trains)	41 m of each stacks each drain	Cyclone with wet scrubber	PM NH ₃ F	150 mg/NM ³ 175 mg/NM ³ 10 mg/NM ³
2.	De dusting unit 2 & 3	31 m	scrubber	PM	150 mg/NM ³
3.	Reaction Vessel-zinc sulphate plant	23 m	scrubber	Acid mist	50 mg/NM ³
4.	Spray Dryer-1	30 m	Quadruple cyclone + scrubber	PM	150 mg/NM ³
5.	Spray Dryer-2	30 m	Quadruple cyclone + scrubber	PM	150 mg/NM ³
6.	De-dusting system unit (3 nos.)	41 m each	wet scrubber	PM	150 mg/NM ³

4.5. The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF & CC dated 18th November-2009. In addition to following parameters Industry shall also carry out



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AAQ monitoring of all other applicable parameter as per MoEF notification dated 18/11/2009 and submit the report to the Board.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in $\mu\text{g}/\text{M}^3$
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than $10 \mu\text{m}$) or PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than $2.5 \mu\text{m}$) or $\text{PM}_{2.5}$	Annual 24 Hours	40 60

- 4.6. The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.
- 4.7. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(A) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

4.8. D.G. Sets Conditions

The D.G. Set shall have acoustic enclosure and shall comply with the standards specified at Sr. no. 95 of Schedule-I of the rule-3 of E.P. Rules -1986 and Noise pollution level as per the Air Act-1981.

D.G. Sets standards:-

The flue gas emission through stack attached to D.G. Sets shall conform to the following standards.

- The minimum height of stack to be provided with each of the generator set shall be $H = h + 0.2 (\text{KVA})^{1/2}$, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed.
- Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.
- The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.

- d) The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).
- e) All efforts shall be made to bring down the noise level due to the D.G. Set, outside the premises, within the ambient noise requirements by proper siting and control measures.
- f) Installation of a D.G. Sets must be strictly in compliance with the recommendations of the D.G. Set manufacturer.
- g) A proper routine and preventive maintenance procedure for the D.G. Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use.

5. AUTHORIZATION as per HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDARY) RULES, 2016 Form-2 [See rule 6 (2)]

Form for grant of authorization for occupier or operator handling Hazardous waste

5.1 Authorization order no:-**AWH-113047** Date of issue: 14/03/2024.

5.2 **M/s. IFFCO Ltd**, is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, treatment, storage, transport of hazardous waste on the premises situated at old Kandla, Kandla unit, Tal: Gandhidham, Dist: Kutch.

Sr. No.	Waste	Quantity per Annum	Schedule/ Category	Facility
1.	Used Oil	10 MT	I-5.1	Collection, storage, Transportation, Disposal by selling out to registered recyclers.
2.	Chemical Sludge Out of zinc sulphate	1650 MT	I-6.1	Collection, storage, Transportation, Disposal by selling out to registered recyclers.
3.	Zinc Ash/ Skimming/ other zinc bearing waste arising from smelting & refining & zinc ash & residue including zinc alloys residues in dispersible form	9900 MT	IV	Procurement, Collection, storage, Transportation and Recycling of zinc ash as a raw material in manufacturing of zinc monohydrate.

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- 5.3 The authorization shall be valid up to **20/10/2028**.
- 5.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.
- 5.5 The authorization is granted to operate a facility for collection, storage within factory premises transportation and ultimate disposal of Hazardous wastes as per condition no 5.2 to the industry having valid CCA of this Board.

5.6 TERMS AND CONDITIONS OF AUTHORISATION

1. The applicant shall comply with the provisions of the Environment (Protection) Act-1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
3. The persons authorized shall not rent, lend, sell, and transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Wastes and Penalty"
7. It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
8. An application for the renewal of an authorization shall be made as laid down in rules 6(2) under Hazardous and Other Waste Rules, 2016.
9. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
10. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
11. The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
12. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. The waste generator shall be totally responsible for (i.e. collection, storage, transportation and ultimate disposal) the wastes generated.
15. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form-4 by 30th day of June of every year for the preceding period April to March.

16. In case of any accident, details of the same shall be submitted on Form-11 to Gujarat Pollution Control Board.
 17. As per "Public Liability Insurance Act-91" company shall get Insurance Policy, if applicable.
 18. Empty drums and containers of toxic and hazard material shall be treated as per guideline published for "Management & Handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
 19. In case of transport of hazardous wastes to a facility for (i.e. treatment, storage and disposal) existing in a State other than the State where hazardous wastes are generated, the occupier shall obtain 'No Objection Certificate' from the State Pollution Control Board or Committee of the concerned State of Union Territory Administration where the facility exists.
 20. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with Form-4.
 21. Industry shall have to display the relevant information with regards to hazardous waste as indicated in the Hon. Supreme Court's Order in W.P. No.657 of 1995 dated 14th October, 2003.
 22. Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.
6. **SPECIFIC CONDITIONS:-**
- 6.1 The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.
 - 6.2 Handling over of the hazardous and other wastes to the authorized actual user shall be only after making the entry in the passbook of the actual user.
 - 6.3 In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.
 - 6.4 The occupier of the facility shall comply Standard operating procedure/guidelines published by MOEF&CC or CPCB or GPCB from time to time.
 - 6.5 Unit shall comply provisions of E-Waste Management Rules-2016.
 - 6.6 The disposal of Hazardous Waste shall be carried out as per the waste Management hierarchy.
 - 6.7 The occupiers of facilities shall not store the hazardous and other wastes for a period not exceeding **ninety days**. Prior permission of the Board shall be obtained for extension of the storage period.
 - 6.8 The occupier shall maintain the records of generation, sale, storage, transport, recycling, co processing and disposal of hazardous waste and make available during the inspection.
 - 6.9 The transportation of the hazardous waste shall be carried out in GPS mounted dedicated vehicles.
7. **GENERAL CONDITIONS: -**
- 7.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,

GANDHINAGAR - 382010,

(T) 079-23232152

- 7.2 Applicant shall also comply with the general conditions given in annexure I.
- 7.3 Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body.
- 7.4 In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.
- 7.5 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.
- 7.6 The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.
- 7.7 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.
- 7.8 In case of change of ownership/management the name and address of the new owners/ partners/directors/proprietor should immediately be intimated to the Board.
- 7.9 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme order in w. p. no. 657 of 1995 dated 14th October 2003.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(T.C. Patel)
Unit Head

NO: PC/CCA-Kutch-84(20)/ GPCB ID-17878/ 797813

Date:- 2/4/24

Issued to:

M/s. IFFCO Ltd. (ID-17878),

Old Kandla, Kandla unit,

Tal: Gandhidham, Dist: Kutch - 370 210.



કાંઠલા ઇકાર્ડ

knd_proc/kandla/iffco
12/18/2010 09:35 AM

To
cc
bcc
Subject



Padam <pb.rastogi@nic.in>
12/16/2010 02:39 PM

To: imurugappan@iffco.nic.in
cc: nkverma@iffco.nic.in
Subject: Manufacture of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) at Kandla, Kutchch District, Gujarat by M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO) - reg.

F. No. J-11011/359/2010-IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003

E-mail : pb.rastogi@nic.in
Telefax : 011: 2436 7668
Dated 16th December,
2010

To:

Shri L. Murugappan
Executive Director
M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO)
District Kutchch - 370201, Gujarat.

E-mail: imurugappan@iffco.nic.in; nkverma@iffco.nic.in;
Fax No.: 02836-270 642.

Subject: Manufacture of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) at Kandla, Kutchch District, Gujarat by M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO) - reg.

Ref. : Your letter no. nil dated 15th July, 2010 and 18th November, 2010.

Sir

Kindly refer to Ministry's letter of even no. nil dated 15th July, 2010 wherein you have submitted a proposal for the Manufacture of Zinc Sulphate



(Monohydrate 33% Zinc, 30,000 MTPY) at Kandla, Kutchch District, Gujarat.

2.0 The proposal was considered and discussed in the 15th Meeting of the Expert Appraisal Committee (Industry-2) held on 22nd-23rd October, 2010. During deliberations, the Committee noted that proposal is for manufacturing of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) only, which is an inorganic chemical.

2.0 The matter was further examined in the Ministry. Since inorganic chemicals are not covered in the EIA Notification, 2006, the proposal is outside the purview of the environmental clearance under the EIA Notification, 2006. However, you are requested to kindly obtain requisite statutory clearances from the State Government and Gujarat State Pollution Control Board as deemed fit.

In view of the above, your **file for the above mentioned proposal is closed and delisted from the Ministry's website**.

(Dr. P. B. Rastogi)
Director

Copy to

- 1 The Secretary, Department of Environment and Forests, Govt. of Gujarat, Gandhi Nagar, Gujarat.
- 2 The Chairman Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10-A, Gandhi Nagar – 382 010, Gujarat

(Dr. P. B. Rastogi)
Director

Minutes approved by the Chairman on 9th November, 2010

MINUTES FOR THE 15th MEETING OF THE EXPERT APPRAISAL COMMITTEE (INDUSTRY-2) HELD DURING 22nd /23rd OCTOBER, 2010

15.4.1 Manufacture of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) at Kandla, Kutch District, Gujarat by M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO) (TORs)

The project authorities and their consultant gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken. All the Fertilizer plants are listed at S.N. 5(a) under Category (A) and appraised at the Central level.

M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO) have proposed for the Manufacture of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) at Kandla, Kutch District, Gujarat. Zinc Sulphate manufactured will be used as a micronutrient in soil. Fertilizer plant to manufacture bulk fertilizer (30 Lakh MTPM) is existing and environment clearance has been accorded for the expansion of fertilizer plants (5.19 to 10.0 Lakh TPA, P₂O₅) vide letter no.J-11011/192/197-IA(II)-I dated 6.8.07. Compliance report is submitted. Consolidated Consented Authorization (CCA) for the existing plant has been accorded by the GPCB vide letter dated 8th November, 2008. Presently DAP and NPK fertilizers are manufactured. Kandla falls under seismic Zone V and necessary precaution will be taken during natural calamities. No protected areas, wildlife sanctuary, national parks are located within 15 km of the project site. The Great Rann of Kutch Bird Sanctuary for Flamingo is at 70 km. Military bases are located within 15 km radius. Total project area will be 3,000-3,500 sq. m. out of total 174 acres. Total cost of the project is Rs. 1600.00 Lakhs.

Zinc ash (65-75%, 14,500 MT) and Sulphuric Acid (16,500 MT) will be used as raw materials, which are hazardous chemicals.

Sulphuric Acid (98% cons.) will be fed into reaction vessel through pipeline from the Sulphuric Acid Storage tank and the Zn ash will be added to the reaction vessel. An agitator will be provided to agitate the Zn ash with Sulphuric acid to produce Zinc Sulphate Monohydrate. Vent and wet scrubber will absorb the H₂ gas liberated during the reaction. The slurry from the reactor will be fed to the filter press and filtrate will be pumped to the spray dryer for drying. The solid residue i.e. mud or spent wash will be

washed in mud washers. The weak liquid will be sent to reactors and mud for disposal. The product i.e. Zinc sulphate monohydrate will be sent for weighing and bagging.

Ambient air data for the period 2005-10 indicates that SPM (161-299 micro gm/m³), SO₂ (7-12 micro gm/m³), NO_x (13-17 micro gm/m³), NH₃ (202-322 micro gm/m³) and RSPM (100-120 micro gm/m³) and are within GPCB limits. Scrubber will be provided to scrub fumes from the reaction vessel. No air emissions will be generated from the proposed plant. Solid escaping from dryer will be recorded by using cyclone separator where the fines will be collected and taken for bagging.

Total water requirement from existing water supply Gujarat Water Supply and Sewerage Board (GWSSB) will be 150 m³/day. The effluent will be generated from the filter press and washing. The liquid effluent generated during scrubbing of H₂ gas, liquor generated during washing and cleaning etc. will be collected and reused in the system for the production of ZnSO₄. Thus, no effluent will be generated from the plant. Service water will be passed through oil separator to remove oil content in the effluent. Domestic Sewage will be treated in existing sewage treatment plant (STP). No effluent will be discharged outside the premises and Zero discharge will be adopted.

Spent ash (0.055 MT/MT of product) having Zinc (3-4%), Lead 5-7%), Iron (1-1.5%), Aluminium (1-1.5%) and rest as inert material will be generated and stored at designated place and disposed off through recycles. Waste / used / spent oil and used batteries will be sold to authorized recyclers / re-processors.

Green belt is already developed in 46% (80 acres) of total plant area of 174 acres. Power (1800 MWH) will be required. Fuel oil (5,400 kl) will be used as fuel. No increase in power demand or facility for the proposed plant will be required. Rain water recharging well have been constructed in township for the conservation of rain water.

After deliberations, the Committee noted that proposal is for manufacturing of Zinc Sulphate (Monohydrate 33% Zinc, 30,000 MTPY) which is an inorganic chemical and is not a fertilizer. Since inorganic chemicals are not covered in EIA Notification, 2006, proposal can not be considered for the environmental clearance and PAs may be asked to obtain other statutory clearances from the State Govt./SPCB. Proposal may be returned to the PAs.



Wholly owned by Cooperatives
Kandla Unit

Environment management Cell (EMC) - IFFCO Kandla

Amount spent by IFFCO Kandla towards the engagement of qualified persons in EMC in FY 2023-24 is given in below table:

Sr. No.	Name	Designation	Qualification	Total Cost Incurred in FY 2023-24 (Rs.in Lakh)
1	Shri Rajesh Ruhela	Jt. General Manager (Technical)	B E (Mechanical)	70.81
2	Shri M L Jalela	Sr. Manager (Laboratory)	B Sc (Chemistry)	43.90
3	Shri Sukrit Srivastava	Manager (Process Engineering)	B Tech (Chemical)	29.11
4	Shri Naresh Dodiya	Ch. Chemist Gr-II	B Sc (Chemistry)	4.85
5	Shri Vinod Kariya	Ch. Chemist Gr-II	B Sc (Chemistry)	4.94
6	Shri Nilesh Shah	Ch. Chemist Gr-I	B Sc (Chemistry)	6.13
7	Shri Rikinkumar Patel	Sr. Chemist Gr-I	B Sc (Chemistry)	7.03
8	Shri Chirag Parmar	Chemist Gr-II	B Sc (Chemistry)	4.45
9	Shri Nirav Patel	Chemist Gr-II	B Sc (Chemistry)	4.68
			Total	175.89



Amount spent by IFFCO Kandla against various modifications for Environment Management during FY 2023-24

Sr. No.	Details of Modifications	Total Cost Incurred in FY 2023-24 (in Rs. Lakh)
1	Replacement of Main Process Stack and Cooler Separator of E train at NPK-II Plant	227.00
2	Replacement & MOC upgradation of aged scrubber vessels and ducts in NPK/DAP Plant	
2.1	Fumes Duct Y Piece of B train (Upgradation from MSRL to SS 316L)	25.78
2.2	Fumes Duct Y Piece of C train (Upgradation from MSRL to SS 316L)	25.78
2.3	Fumes Duct Y Piece of D train (Upgradation from MSRL to SS 316L)	25.78
2.4	New Fumes Separator – C train (Upgradation from MSRL to SS 316L)	0.00
2.5	New Fumes Separator – E train (Upgradation from MSRL to SS 316L)	35.60
2.6	New Dryer Separator-F Train (Upgradation from MSRL to SS 316L)	86.27
2.7	New Dryer Fan Discharge duct-F Train (Upgradation from MSRL to SS 316L)	17.50
2.8	Bottom Portion of Tail Gas Separators in A B C & D trains (UPGRADATION FROM SS 316L TO DUPLEX STEEL SS 2205)	145.77
3	Replacement of Pre-Neutralizer tank in 'A' Train with MOC of SS904L	230.31
4	Capacity enhancement of Dust Fan in 'B' train at K-I Plant to 51000 ACMH	59.18
5	Revamping of Dust Cyclones, Cooler Cyclones and Dryer Cyclone in 'E' train at K-II Plant	41.50
6	MOC upgradation of Tail Gas Separator of E train at NPK-II plant (Bottom - SS 904L & Top-SS316L)	215.50
7	Modification of Bulk storage conveyor belts '107 E F G & H' at K-II Bulk Storage Shed	257.74
8	Installation of New Screw Chiller Unit at Administration Building	20.91
9	Replacement of Single Skin AHU with Modular doubled Skin AHU in K-II Plant	55.72
	TOTAL	1470.33



1. Replacement of Main Process Stack and Cooler Separator of E train at NPK-II Plant

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'09"N 70°12'56"E	23°02'09"N 70°12'56"E
 <p>10/01/2024 10:05</p>	 <p>30/01/2024 09:50</p>

2. Replacement & MOC upgradation of aged scrubber vessels and ducts in NPK/DAP Plant**2.1. Fumes Duct Y Piece of B train (Upgradation from MSRL to SS 316L)**

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'05"N 70°13'11"E	23°02'05"N 70°13'11"E
 <p>15/02/2024 11:07</p>	 <p>28/02/2024 09:48</p>

2.2. Fumes Duct Y Piece of C train (Upgradation from MSRL to SS 316L)

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'03"N 70°13'09"E	23°02'03"N 70°13'09"E
 <p>15/02/2024 11:16</p>	 <p>28/02/2024 10:02</p>

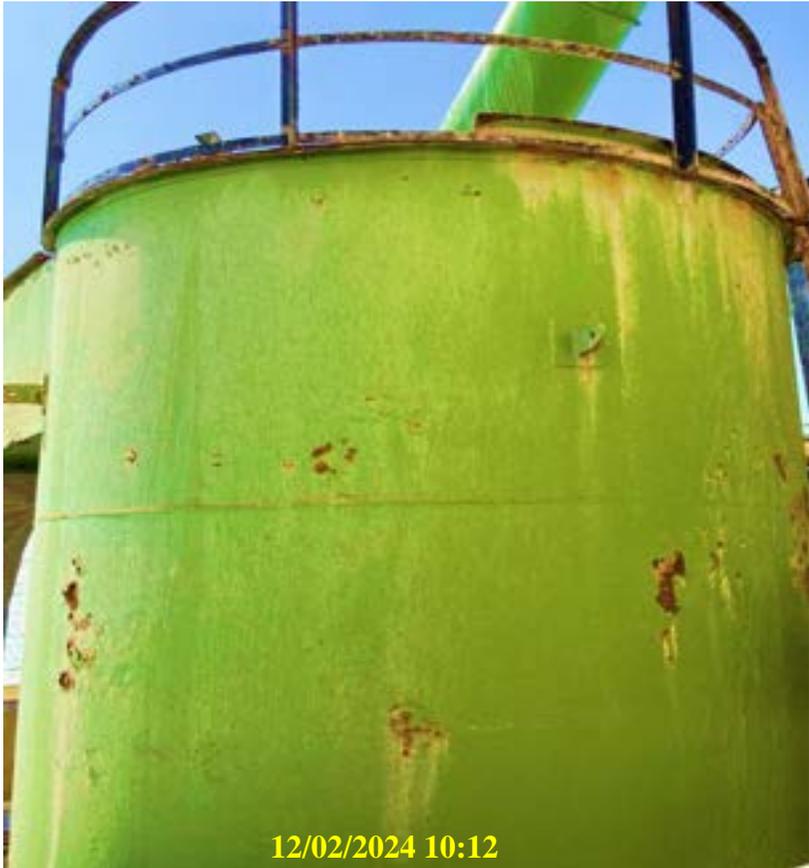
2.3. Fumes Duct Y Piece of D train (Upgradation from MSRL to SS 316L)

Before	After
<p>Geo-Location (Latitude, Longitude)</p>	<p>Geo-Location (Latitude, Longitude)</p>
<p>23°02'05"N 70°13'11"E</p>	<p>23°02'05"N 70°13'11"E</p>
	

2.4. New Fumes Separator – C train (Upgradation from MSRL to SS 316L)

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'03"N 70°13'09"E	23°02'03"N 70°13'09"E
 <p>15/02/2024 11:08</p>	 <p>28/02/2024 10:01</p>

2.5. New Fumes Separator - E train (Upgradation from MSRL to SS 316L)

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'09"N 70°12'56"E	23°02'09"N 70°12'56"E
 <p data-bbox="533 1299 766 1331">12/02/2024 10:12</p>	 <p data-bbox="1576 1307 1809 1339">24/02/2024 14:09</p>

2.6. New Dryer Separator-F Train (Upgradation from MSRL to SS 316L)

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23.0359, 70.2156	23°02'08"N 70°12'58"E
 <p>15/02/2024 12:10</p>	 <p>28/02/2024 14:06</p>

2.7. New Dryer Fan Discharge duct-F Train (Upgradation from MSRL to SS 316L)

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23.0359, 70.2156	23°02'08"N 70°12'58"E
 <p>15/02/2024 11:53</p>	 <p>28/2/2024 13:48</p>

2.8. Bottom Portion of Tail Gas Separators in A B C & D trains (UPGRADATION FROM SS 316L TO DUPLEX STEEL SS 2205)

Before	After
<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>	<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>
<p style="text-align: center;">23°02'05"N 70°13'10"E</p>	<p style="text-align: center;">23°02'05"N 70°13'10"E</p>
	

3. Replacement of Pre-Neutralizer tank in 'A' Train with MOC of SS904L

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'05"N 70°13'10"E	23°02'05"N 70°13'10"E
 <p>12/08/2023 11:14</p>	 <p>29/08/2023 12:17</p>

4. Capacity enhancement of Dust Fan in 'B' train at K-I Plant to 51000 ACMH

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23.0359, 70.2156	23.0359, 70.2156
	

5. Revamping of Dust Cyclones, Cooler Cyclones and Dryer Cyclone in 'E' train at K-II Plant

Revamping of Cooler Cyclones in 'E' train at K-II Plant

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'09"N 70°12'56"E	23°02'09"N 70°12'56"E
	

Revamping of Dust Cyclone in 'E' train at K-II Plant	
Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23.0359, 70.2156	23°02'09"N 70°12'56"E
 <p>17/10/2023 11:00</p>	 <p>29/10/2023 14:17</p> <p>DUST CYCLONE</p>

Revamping of Dryer Cyclone in 'E' train at K-II Plant	
Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23.0359, 70.2156	23°02'09"N 70°12'56"E
 <p>17/10/2023 11:03</p>	 <p>29/10/2023 14:11</p>

6. MOC upgradation of Tail Gas Separator of E train at NPK-II plant (Bottom - SS 904L & Top-SS316L)

Before	After
<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>	<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>
<p style="text-align: center;">23.0359, 70.2156</p>	<p style="text-align: center;">23°02'09"N 70°12'56"E</p>
	

7. Modification of Bulk storage conveyor belts '107 E F G & H' at K-II Bulk Storage Shed

Before	After
<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>	<p style="text-align: center;">Geo-Location (Latitude, Longitude)</p>
<p style="text-align: center;">23°01'59"N 70°12'58"E</p>	<p style="text-align: center;">23°01'59"N 70°12'58"E</p>
	

8. Installation of New Screw Chiller Unit at Administration Building

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°01'59"N 70°12'58"E	23°01'59"N 70°12'58"E
 <p>12/02/2024 12:01</p>	 <p>29/02/2024 13:06</p>

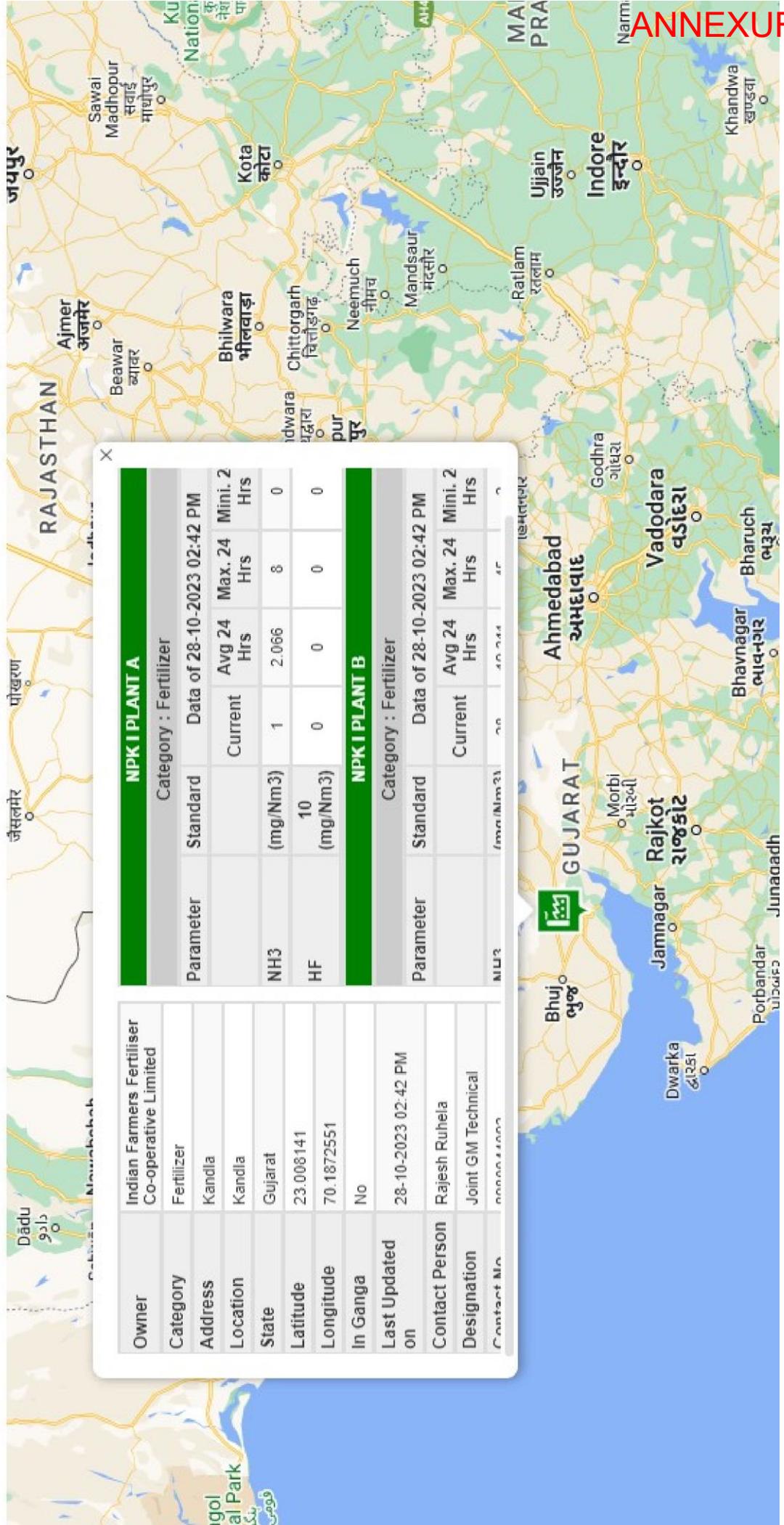
9. Replacement of Single Skin AHU with Modular doubled Skin AHU in K-II Plant

Before	After
Geo-Location (Latitude, Longitude)	Geo-Location (Latitude, Longitude)
23°02'04"N 70°12'59"E	23°02'04"N 70°12'59"E
 <p>16/02/2024 12:01</p>	 <p>29/02/2024 15:45</p>

Ammonia and HF data uploading at CPCB Server

[A](#)
[VALIDATION](#)
[REPORTS](#)
[OFFLINE STATIONS REASON](#)

LIVE MAP



AMMONIA & HF ANALYSER SYSTEM

IFFCO

Wholly owned by Cooperatives



Emitter Unit



Receiver Unit



Indication on DCS Panel



Analyzer Monitor

ANNEXURE-VII

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

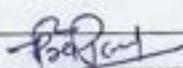
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/030/23-24	Date of Issue	14/03/2024
Sample Description	Flue Gas	Stack attached to	Boiler (14 TPH)
Date and time of sampling	06/03/2024 13:00 hrs.	Duration of sampling	65.20 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/030
Fuel used	Coal	Stack gas Velocity in m/sec	3.96
Stack height in meter	51	Stack diameter in meter	1.5M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	165	Ambient temperature in °C	32
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	10/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	101	150
2.	Sulphur Dioxide (SO ₂)	ppm	IS 11255 (Part 2) :1985	70.9	100
3.	Oxide of Nitrogen (NO _x)	ppm	IS 11255 (Part 7) :2005	27.0	50

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

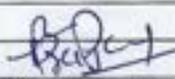
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/028/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	De Dusting – 2
Date and time of sampling	07/03/2024 11:35 hrs.	Duration of sampling	48.7 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/028
Fuel used	NA	Stack gas Velocity in m/sec	5.97
Stack height in meter	31	Stack diameter in meter	0.9
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	32	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	70.4	150

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
---	---	---

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

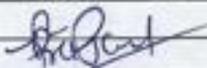
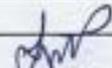
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/029/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	De Dusting – 3
Date and time of sampling	07/03/2024 12:40 hrs.	Duration of sampling	49.2 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/029
Fuel used	NA	Stack gas Velocity in m/sec	5.34
Stack height in meter	31	Stack diameter in meter	0.9
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	33	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	67.8	150

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

		
Mr. Jignesh Prajapati		Mr. Sandip Patel
Chemist		Technical Manager
Tested By		Reviewed and Approved By

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

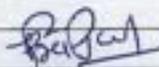
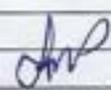
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/023-A/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – A)
Date and time of sampling	06/03/2024 10:20 hrs.	Duration of sampling	49.4 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/023-A
Fuel used	NA	Stack gas Velocity in m/sec	8.40
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	54	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	29.5	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	1.80	10

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

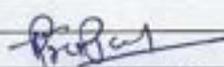
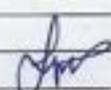
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/023/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – A)
Date and time of sampling	06/03/2024 10:20hrs.	Duration of sampling	49.40 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/023
Fuel used	NA	Stack gas Velocity in m/sec	8.40
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	54	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	68.8	150

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

F/OPN/05

Issue No.: 03

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Stack Analysis

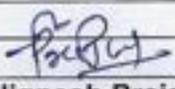
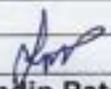
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/024-A/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – B)
Date and time of sampling	06/03/2024 11:20 hrs.	Duration of sampling	52.3 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/024-A
Fuel used	NA	Stack gas Velocity in m/sec	8.17
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jaydeep Prajapati
Stack temperature of Process Emission in °C	62	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	24.6	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	1.5	10

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

		
Mr. Jignesh Prajapati Chemist		Mr. Sandip Patel Technical Manager
Tested By		Reviewed and Approved By

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

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 Issue No.: 03
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Stack Analysis

Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/024/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – B)
Date and time of sampling	06/03/2024 11:20 hrs.	Duration of sampling	52.3 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/024
Fuel used	NA	Stack gas Velocity in m/sec	8.17
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	62	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	64.0	150

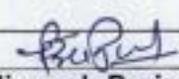
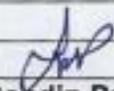
Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory					
Test Report				F/OPN/05 Issue No.: 03 Page 1 of 1	
Stack Analysis					
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.				
Discipline	Chemical	Group	Atmospheric Pollution		
Report No.	SGT/S/03/025-A/23-24	Date of Issue	14/03/2024		
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – C)		
Date and time of sampling	06/03/2024 12:25 hrs.	Duration of sampling	53.1min		
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/025-A		
Fuel used	NA	Stack gas Velocity in m/sec	8.42		
Stack height in meter	41	Stack diameter in meter	2.8M		
Sampling Procedure	IS 11255	Sampling By	Jaydeep Prajapati		
Stack temperature of Process Emission in °C	56	Ambient temperature in °C	32		
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory		
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09		
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024		
Test Results					
Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	19.4	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	0.9	10
Remarks →					
<ul style="list-style-type: none"> • Test Report shall not be reproduced except in full, without written approval of the Laboratory. • Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer. • Opinion & Interpretation is not given. • Decision rule is not applicable. 					

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

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 Issue No.: 03
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Stack Analysis

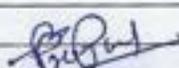
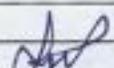
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/025/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – C)
Date and time of sampling	06/03/2024 12:25 hrs.	Duration of sampling	53.1 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/025
Fuel used	NA	Stack gas Velocity in m/sec	8.42
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	56	Ambient temperature in °C	32
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	66.9	150

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

		
Mr. Jignesh Prajapati		Mr. Sandip Patel
Chemist		Technical Manager
Tested By		Reviewed and Approved By

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

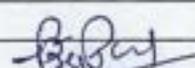
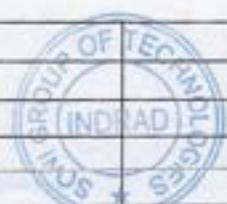
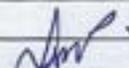
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/026-A/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – D)
Date and time of sampling	06/03/2024 14:00 hrs.	Duration of sampling	50.1min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/026-A
Fuel used	NA	Stack gas Velocity in m/sec	8.64
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jaydeep Prajapati
Stack temperature of Process Emission in °C	55	Ambient temperature in °C	32
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	16.8	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	1.0	10

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

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 Issue No.: 03
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Stack Analysis

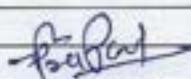
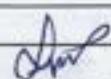
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/026/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – D)
Date and time of sampling	06/03/2024 14:00 hrs.	Duration of sampling	50.1 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/026
Fuel used	NA	Stack gas Velocity in m/sec	8.64
Stack height in meter	41	Stack diameter in meter	2.8M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	55	Ambient temperature in °C	32
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	64.2	150

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

	
Mr. Jignesh Prajapati	Mr. Sandip Patel
Chemist	Technical Manager
Tested By	Reviewed and Approved By

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

F/OPN/05

Issue No.: 03

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Stack Analysis

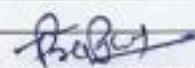
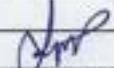
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/027-A/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPK Process(Stack – E)
Date and time of sampling	07/03/2024 09:30 hrs.	Duration of sampling	52.1 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/027-A
Fuel used	NA	Stack gas Velocity in m/sec	8.60
Stack height in meter	41	Stack diameter in meter	2.9M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	57	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	22.5	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	1.3	10

Remarks →

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- Opinion & Interpretation is not given.
- Decision rule is not applicable.

		
Mr. Jignesh Prajapati		Mr. Sandip Patel
Chemist		Technical Manager
Tested By		Reviewed and Approved By

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

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

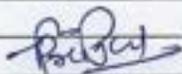
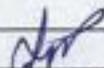
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/027/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – E)
Date and time of sampling	07/03/2024 09:30 hrs.	Duration of sampling	52.1 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/027
Fuel used	NA	Stack gas Velocity in m/sec	8.60
Stack height in meter	41	Stack diameter in meter	2.9M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	57	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	52.5	150

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

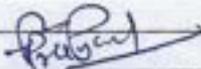
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd. Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/022-A/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – F)
Date and time of sampling	07/03/2024 10:30 hrs.	Duration of sampling	50.3 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/022-A
Fuel used	NA	Stack gas Velocity in m/sec	8.42
Stack height in meter	41	Stack diameter in meter	2.9M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	52	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits as per GPCB
1.	Ammonia (NH ₃)	mg/Nm ³	IS 11255 (Part 6) :1999	20.3	175
2.	Fluoride	mg/Nm ³	IS 11255 (Part 5) :1990	0.9	10

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By		 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Soni Group of Technologies – Environmental Testing Laboratory
Test Report

 F/OPN/05
 Issue No.: 03
 Page 1 of 1

Stack Analysis

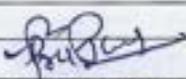
Name and Address of Customer	M/s. Indian Farmers Fertilizer Co. Ltd. Kandla Unit, Kutch, 372010.		
Discipline	Chemical	Group	Atmospheric Pollution
Report No.	SGT/S/03/022/23-24	Date of Issue	14/03/2024
Sample Description	Process Stack	Stack attached to	NPKProcess (Stack – F)
Date and time of sampling	07/03/2024 10:30 hrs.	Duration of sampling	50.3 min
Sample Receipt Date	07/03/2024	Sample ID	SGT/S/03/022
Fuel used	NA	Stack gas Velocity in m/sec	8.42
Stack height in meter	41	Stack diameter in meter	2.9M
Sampling Procedure	IS 11255	Sampling By	Jay Dhobi
Stack temperature of Process Emission in °C	52	Ambient temperature in °C	31
Environmental Condition during testing	25 ± 2 °C	Location of test performed	At Laboratory
Condition of sample during receipt	Satisfactory	Sampling plan	E/SYS/09
Testing Test Start Date	09/03/2024	Testing Test End Date	11/03/2024

Test Results

Sr. No.	Parameters	Unit	Test Method	Results	Limits
1.	Particulate Matter	mg/Nm ³	IS 11255 (Part 1) :1985	69.9	150

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

 Mr. Jignesh Prajapati Chemist Tested By	 Mr. Sandip Patel Technical Manager Reviewed and Approved By
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----- End of Test Report -----

Photographs of Green Area



Photographs of Green Area



Photographs of Green Area





**INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
KANDLA UNIT**

**ON-SITE EMERGENCY ACTION PLAN
AND
ROLE OF KEY PERSONNEL & ESSENTIAL STAFF**

**PREPARED BY
FIRE & SAFETY SECTION**

Note : On hearing Emergency Siren Non Essential Staff who are not allotted specific duty in Action Plan for On - Site Emergency must assemble at safe Assembly Points as mentioned in this Plan after consulting their Sectional Heads / Area Incharge. All HODs./SHs should take necessary action to assemble the Non Essential Staff and Contract workmen working under them at nearest safe Assembly Points.

EMERGENCY SIREN TONE:

In case of emergency the siren will be blown as below

FIRE	:	Wailing sound for Two Minutes.
Gas Leak	:	Wailing sound for Two Minutes And repeat further after 30 Seconds.
All Clear / Testing	:	Continuous sound for Two Minutes.
TESTING	:	1st day of every month at 10.00 Hrs.

Emergency Phones : FIRE: 4555 / 4666, MEDICAL: 4777 / 4574, SECURITY: 4855 / 4856

GENERAL INFORMATION:

Through the Environment Protection Act – 1986, the Central Government had notified 'The Manufacturing, Storage and Import of Hazardous Chemicals Rules - 1989, amended in 1994 and 2000.

The Factories Act - 1948 was amended in 1987 after the Bhopal tragedy under which it was laid down that the Occupier of the hazardous Factory is responsible to prepare the On-Site Emergency Plan and the same should be submitted to The Chief Inspector of Factories for approval. The plan should contain detailed disaster control measures also.

Under both the above Acts and Rules, the Factory handling the hazardous chemicals must prepare the emergency plan as under.

On Site Emergency Plan: - To be prepared by Occupier of the Factory.

Off Site Emergency Plan: - To be prepared by District authorities in consultation with factories.

IFFCO - Kandla has prepared the On-Site Emergency Plan and the action plan and the same is distributed to all concerned.

On - Site Emergency:

Emergency is the kind of situation which can cause casualties within the plant premises. It may need to have help of outside agencies to bring the situation under control. Operational emergency on equipment failure situation which may go beyond control with time for long duration are also put under this category.

Off - Site Emergency:

This kind of emergency includes events, likely to endanger human life, plant, and equipment within IFFCO premises and in neighborhood and it is not possible to control with the resources available within IFFCO, Help of Local Administration, Police, State Transport, and Medical Center and Hospitals shall be required to control and contain the emergency.

Emergency situation in neighboring industry that may affect IFFCO are also included in this category.

CLASSIFICATION OF EMERGENCIES:

According to our plan the emergency is categorized in three levels i.e.

LEVEL - 1 The level of emergency which is controllable within the plant / area.

Emergency may be due to:

- a) Small spot of fire in the plant.
- b) Toxic gas release for short duration.
- c) Collapse of small equipments.

LEVEL - 2 The emergency which is confinable within the Factory premises.

Emergency may be due to:

- a) Big fire in factory premises
- b) Medium scale explosion
- c) Heavy leakage of toxic gas for short duration.

LEVEL- 3 Likelihood of vapor cloud with formation of toxic / flammable gases drifting and affecting the general public (i.e. outside of plant premises). This type of emergency arises out of:

- a) Explosion in high pressure vessel containing toxic / flammable material.
- b) Heavy leakage of toxic material for a long duration from pipe line or storage tanks.

The following priorities are to be borne in mind while directing all operations.

- Safety of personnel
- Minimum damage to plant, property, and environment.
- Minimum loss of material.

ESSENTIAL PERSONNEL:

- (1) Operating Personnel of Affected Plant / Area
- (2) Fire & Safety Personnel
- (3) Medical Staff
- (4) Security Staff
- (5) Operating Personnel of non affected Plant / Area
- (6) On duty Shift Staff of Mech. Maintenance / Workshop / Electrical / Instrument / Laboratory

NON-ESSENTIAL STAFF:

All the persons who are not listed in essential personnel and not included in this action plan will report to Assembly Point after consulting their Sectional Heads / Area Incharge.

AFFECTED / NON-AFFECTED PLANTS / AREA:

NPK – K I / K – II / Offsite K – I / B&MH / Barge Jetty Plants are considered for having potential to develop Onsite / Offsite emergency due Toxic release & or Fire.

Any plant / Area meeting with an emergency is known as an affected plant. The rest of the plant / area are known as non-affected plants.

EMERGENCY CONTROL CENTRES (ECC):

- (1) At Fire & Safety Section
 - (2) Alternate ECC – EF Train Control Room
- [If emergency situation affects ECC & wind direction is towards Time Office then Alternate ECC will be taken in line.]

ASSEMBLY POINTS:

In case of any emergency, the employees who are not allotted specific duties in the action plan and non-essential staff must assemble at following assembly point.

ASSEMBLY POINTS	<u>ASSEMBLY POINT INCHARGE</u>
MAIN WORKSHOP (Mech.)	Sectional Head / Shift Incharge of Transportation Section
E&F TRAIN GROUND FLOOR	Sectional Head / Shift Incharge of NPK K – II
BUS STAND AREA	Head of IT Services

EMERGENCY EXIT ROUTE:

In case of Ammonia leakage and wind direction towards time office, alternative emergency escape gate may be used for exit.

FIRST HAND INFORMATION, ROLE OF KEY PERSONNEL, ON HEARING EMERGENCY SIREN:

FIRST HAND INFORMATION: -

As per the emergency plan, any person at shop floor level who possesses the first information of leakage of toxic gas or Fire will communicate about the emergency as under: -

By informing to concerned control room / Shift Incharge immediately.

In Fire Control Room Local telephone 4666 / 4555

By shouting and informing others working in a nearby area.

If there is a Fire incident, then try to extinguish immediately with available extinguisher in near by area.

Please remember while passing information:

Give your name & location of incidence & give direction to Fire Tender by sending one person to main road where incident has taken place.

ROLE OF KEY PERSONNEL ON HEARING EMERGENCY SIREN:

1. Unit Head will reach to Emergency Control Centre (ECC) or Alternate Emergency Control Centre depending upon wind direction & situation of emergency if ECC is affected.
2. HODs of Maintenance / Production / Technical / Material / P & A / F& A / Non affected Plant will report to Chief Emergency Controller [Unit Head] at ECC
3. Sectional Heads of Maintenance / Workshop / Civil / Instrument / Electrical / Non affected Plant will report to their normal workplaces if not demanded by Incident Controller / Site Main Controller / Chief Emergency Controller; Accordingly instruct staff under their control to report to Incident place & or / plant to be present at their normal workplace or to go to declared Assembly Point at the time of Emergency for further instruction & or if evacuation is needed.
4. All other Sectional Heads will report / remain at their normal workplaces with their staff and keep contact with their HOD or role allotted in emergency action plan.
5. All the HOD's and Section Head should attend Post Mock Drill meeting.
6. All the non-essential employees will contact their Sectional Heads / Area Incharge for further instructions.
7. All Contractor's Labor will follow safe route after seeing the wind direction and reach the assembly point for further instructions.

ROLE OF CHIEF EMERGENCY CONTROLLER: (UNIT HEAD)

On receipt of information about the emergency or hearing the siren, he shall proceed to Emergency Control Centre and take charge of Chief Emergency Controller.

He has overall responsibilities of directing operation and calling outside help from emergency control room. **OR**

An alternative ECC in case of adverse condition is EF Train Control Room.

Assess the situation quickly and decide the level of emergency (L₁, L₂ or L₃) after getting information from Incident / Site Main Controller.

If an emergency of L₁ level or L₂ (Onsite) is turning to L₃ (Offsite) level inform District Authorities for operating Offsite emergency plan.

Keep in contact with the Site Main Controller and direct him to handle emergency. Ensure that all services for tackling emergencies are in line and advise them accordingly.

Direct all emergencies within the affected area with the following priorities.

- a) Personnel Safety
- b) Plant, Property & Environment Safety.
- c) Minimum loss of production.

Direct safe shut down of plants in consultation with incident controller & key personnel, if necessary.

Ensure that all non-essential workers, visitors, contractors are evacuated to assembly points.

If necessary arrange for evacuation of neighboring population with the help of District Magistrate, Dy.SP, Asst. Director (IS&H).

Ensure that searches for causalities within the affected area have been carried out and arrange for hospitalization of victims.

Seek outside help from others as per requirement.

Ensure that HOD (P&A) liaison with outside agencies such as Police, District emergency authorities i.e., Collector, officials of Directorate of Industrial Safety & Health and Local Pollution Control Board. Provide advice on possible effects to areas outside the factory.

Ensure that press note is prepared and released to press & media.

ROLE OF INCIDENT CONTROLLER:
Shift In charge of Affected Plant / Area (Production)

Area In charge will act as Incident Controller till Shift In charge / Section Head reached

On receiving the information of emergency, the shift in charge / area in charge concerned will direct his staff to control the situation by available gears. He will assess the scale of emergency likely to exist i.e., L₁, L₂ OR L₃. Categorize the risk and

Inform Fire Control room (4666 / 4555) if fire crew did not reach till that time.
 Inform Plant Dispensary (4777 / 4574) if personnel injury is reported / observed.

1. Decide whether to stop or continue the process and take technical decisions to control the incident and inform / instruct next person to inform Unit Head regarding incident and consult senior officers as per requirement.
2. **If emergency of L₁ or L₂ level is turning to L₂ / L₃ level and need arises to activate emergency action plan by giving information / intimation to Fire Control room In charge (phone 4555 / 4606) for blowing emergency Siren for Gas / Fire code if Sectional Head (Site Main Controller) does not reach at the site.**
3. Inform laboratory in charge to carry out ambient air and effluent sample.
4. **THE INCIDENT CONTROLLER HAS TO EXECUTE THE FOLLOWING RESPONSIBILITIES.**
 - a) Direct evacuation of plant and areas likely to be affected by the emergency.
 - b) Ensure required key personnel are called in.
 - c) Advice firefighting, rescue team and provide additional manpower / material from non-affected plant.
 - d) Direct for search of causalities.
 - e) Evacuate non-essential workers to assembly points.
 - f) Preserve evidence for subsequent inquiry into the cause of emergency.
5. He will hand over the charge to Site Main Controller (Section Head) when he reaches the scene of Incident.

ROLE OF SITE MAIN CONTROLLER: PRODUCTION
(Section Head of Affected Plant / Area)

After receiving information from Area In charge / Incident Controller, inform Unit Head about incident if not already informed by Incident Controller and reach to the scene of incident and assess the level of emergency.

Take the charge of Site from Incident Controller.

Decide whether to stop or continue the process and take technical decision to control the incident. Consult Chief Emergency Controller (Unit Head) regarding the situation arising.

If Emergency not declared by Incident Controller than, inform to Fire Control room In charge (phone 4555 / 4606) for blowing emergency Siren for Gas / Fire code

Direct Incident Controller in co-ordination with Chief Emergency Controller to control the Emergency and safe shut down of plant as situation demands.

Site Main Controller has to execute the following responsibilities.

- A) Direct evacuation of plant and areas likely to be affected by the emergency.
- b) Ensure that the required key personnel are called in.
- c) Advise firefighting, rescue team and other emergency services.
- d) Direct search of causalities, if any.
- e) Evacuate non-essential workers to assembly points.
- f) Brief chief emergency controller on the developments.
- g) Arrange for additional help for fire crew as per requirement of fire service in charge
- h) Preserve evidence for subsequent inquiry into the cause of incident / emergency.

After consulting the Fire & Safety Section In charge, declare all clear at site & inform at Emergency Control Centre (Fire Control room) to declare all clear by blowing siren.

FIRE & SAFETY SERVICES**SHIFT INCHARGE (F&S):**

As soon as, notified about the location of Fire / Gas leak,
Inform Section Head of Fire & Safety.

Blow the Siren if asked by Area Incharge or Incident Controller (Shift In charge) / Site Main Controller (Section Head) by the emergency Siren as per required code i.e., Fire / Gas Leak.

Ensure Fire Pumps on Auto mode.

Depute one Fire staff person at Fire Control Room.

Proceed immediately to the scene of incident with fire tender & crew.

Position the Fire tender depending on the wind direction.

Decide the course of action in consultation with the area Incharge or Shift In charge (Incident Controller) and take suitable measures to extinguish the fire / assist in controlling gas leak.

Direct Rescue operation if needed.

Seek the help of trained employees from Incident Controller for controlling the Emergency Situation.

Ensure that crew members are provided with proper safety equipments for tackling the emergency.

Assess the severity of the incident, and inform Incident Controller to call for additional vehicles, equipments, extinguishing media or and help from mutual aid.

Till the arrival of Sectional Head (F&S) or Fire Officer, guide the fire crew in firefighting and rescue operation by giving clear instruction.

Fire Control Room Fire staff ensure following:

Ensure that ambulance goes to the place of incidence.

Ensure that the pressure in the fire hydrant system is maintained, if required put available pumps in auto system and still if pressure is not available in hydrant system request help of Maint. Service Staff for smooth running of Fire pumps.

Record all the messages received in a register and work as per the direction of Incident Controller / Site Main Controller till arrival of Chief Emergency Controller (Unit Head)

ROLE OF SECTIONAL HEAD OF FIRE & SAFETY:

After receiving information from Fire Control Room Inform Unit Head / HOD about incident and reach to the scene of Incident.

Direct the firefighting, emergency operations with Fire Crew & other trained persons.

Keep in constant touch with Chief Emergency Controller for additional help, if necessary, till arrival of Site Main Controller.

On arrival of Site Main Controller, inform him regarding additional help for incident control action who in turn will convey to Chief Emergency Controller

Ensure that all equipments & PPEs required are available at site and if required arrange for additional requirement.

Direct Rescue operation and send the victims to First Aid Center for treatment.

Inform Site Main Controller to get help from DPA, Emergency Response Centre, KASEZ, G'dham Municipality Fire Brigades & nearby Industries.

Direct the Crew members at the scene of Emergency and reinforce, replenish equipments / extinguishing media & firefighting crew.

Consult the Site Main Controller and both will take decision for declaration of all clear.

MAINTENANCE SERVICES

ROLE OF Sectional Heads of Mechanical / Workshop / Civil / Electrical / Instrument

Sectional Heads of Mechanical / Workshop / Civil / Electrical / Instrument are required to remain present at their normal workplaces and keep contact with their HOD and also follow the decision made by Incident Controller / Site Main Controller / Chief Emergency Controller in the light of information received by them on the developing situation of emergency. Keep constant contact with their HOD.

They shall guide the staff under their control, providing assistance/ support for controlling the emergency situation and evacuation of personnel.

HOD OF MAINTENANCE SERVICES:

Mobilize staff and necessary tools & tackles for help if required by Incident Controller / Site Main Controller for emergency Maintenance work at the place of Incident. Direct concerned personnel for providing necessary help for tackling the Emergency.

Depute one person from each discipline i.e. Mechanical, Electrical, Instrument to look after the services of Fire Pumps till all clear siren is blown.

SECURITY SERVICES

ROLE OF SECURITY HEAD / SHIFT INCHARGE / SECURITY GUARDS

A) SECURITY HEAD / SHIFT IN-CHARGE:

Depute Security Guards at OHC and at incident place for help and controlling situation.

After hearing Siren, inform the location of fire/ Gas leak to the essential key personnel and guide the personnel coming to plant.

During non-General Shift hours, inform All HODs regarding emergency i.e., Fire / Gas leak.

Guide statutory authority to go to Emergency Control Centre.

Depute Security Guard for manning the gates & traffic control at the scene of incident.

Prevent unauthorized entry in the Factory.

Render assistance as requested by Fire & Safety In charge / Incident Controller at the scene of Incident.

Mobilize additional Security for help if required.

No vehicles should be allowed inside the plant except Ambulance, Fire Tenders & emergency vehicles along with essential personnel & also direct them to the scene of incident.

Help to evacuate the persons at the scene of incident.

Arrange to provide list of contractor workers working, visitors & vehicles for evacuation purpose if required by Assembly point in charge / Chief Emergency Controller.

To operate Jeep with Public Address system to warn surrounding public as directed by Chief Emergency Controller.

B) SECURITY GUARDS:

On hearing the emergency Siren, contact Shift Security In Charge & work under his instructions.

ADMINISTRATION & PERSONNEL SERVICES

ROLE OF HOD / SECTIONAL HEAD

On getting information of emergency Immediate report to Chief Emergency Controller at Emergency Control Centre (ECC).

Ensure that the media is properly guided and authentic news made available for press and media.

Arrange vehicles to shift casualties from plant site to Hospitals & evacuation of persons from assembly points to outside shelters.

Arrange buses at Assembly Points for evacuation of people.

In addition to our vehicles arrange for hired vehicles and additional drivers if necessary for other services such as Welfare / Stores / Purchase.

Ensure that the telephone operator is deputed to convey messages. Keep the board free to the extent possible for incoming calls. Convey messages to Senior Officials / Nearby Organization Head etc. as directed by Chief Emergency Controller.

Arrange shelters in consultation with local authority and NGO's.

Organize canteen services for hot drinks / snacks / food as required & other welfare services etc. at the scene of incident & required locations.

A messenger /runner is to be kept ready to pass the messages in case of failure of communications.

Keep in touch with local Govt. Authorities and nearby fire services for their help. Inform District Magistrate, Sr. Insp. of Factories, Police Dept., and GPCB etc. as per statutory requirements.

Arrange round the clock availability of people at hospital to look after the affected persons.

Prepare records of affected personnel with local and permanent addresses & inform their nearest relatives.

Take necessary action for compliance of statutory needs such as information / reports etc. to concerned authority as per existing guidelines.

Depute one person for manning Assembly Points & maintain records of evacuated persons at various shelters / locations.

ROLE OF HOD / SECTIONAL HEAD FIRST AID AND MEDICAL SERVICES

ROLE OF MEDICAL SERVICE HEAD / SHIFT INCHARGE PLANT DISPENSARY / MEDICAL STAFF

SHIFT INCHARGE PLANT DISPENSARY:

On receipt of instruction from Incident Controller / Fire Control room direct Ambulance to the scene of incident.

OR on Hearing Siren of Fire Tender send Ambulance and advice to follow Fire Tender to the scene of incident.

Inform MEDICAL SERVICE HEAD / DOCTORS regarding incident.

Be ready to provide First Aid to Victims / Injured.

HEAD OF MEDICAL SERVICES / DOCTOR:

On receipt of information from Plant Dispensary immediately report to the first aid Centre of plant and take following actions.

Keep all necessary Medicines, artificial respiration equipments etc. ready.

Render first Aid to Victims / Injured Persons & send them in time for further treatment if required.

Inform all Hospitals / Doctors of Kandla, Gandhidham regarding Incident and gear up for hospitalization and treatment of Victims / Injured persons.

Contact Chief Emergency Controller for additional help.

MEDICAL STAFF:

After receiving information or hearing Siren contact Sectional Head / Shift In charge and work as directed by them.

LABORATORY

ROLE OF SECTIONAL HEAD / SHIFT INCHARGE / CHEMIST - (LABORATORY)

After getting information of emergency remain present at your normal work places.

Arrange to carry out ambient air and effluents samples test as directed by Incident Controller or Site Main Controller.

ASSEMBLY POINT MANAGEMENT

ROLE OF SECTIONAL HEAD / SHIFT INCHARGE (TRANSPORTATION), NPK K-II AND IT SERVICES

On hearing the Siren or intimation of Emergency immediately proceed to Assembly Point and inform to their HOD.

Manning the Assembly Point and get help from Sectional Head of (P&A) to shift the persons at shelters, if required and maintain the record of persons reported at assembly points and transfer them to shelters or other places.

Keep in constant touch with their HOD & Co-ordinate other related activities as per requirement.

SUPPLY AND REPLENISHMENT MANAGEMENT

ROLE OF HOD (MATERIALS) / (F&A)

On receipt of information about the emergency or hearing the siren, immediately report to Chief Emergency Controller at Emergency Control Centre (ECC).

Direct all other Sectional Heads under their control to remain at their normal workplaces with their staff and instruct them as per requirement for further action.

Arrange additional manpower for handling Store items etc.

Arrange to issue items / equipments required during emergency.

Take immediate action of emergency procurement and arrange additional manpower for local purchase etc. If required.

MUTUAL AID SCHEME

ROLE PLAYED BY MEMBERS OF MUTUAL AID SCHEME

On receiving the call they proceed immediately with fire crew and Fire Tender.

The place of incident will be guided by IFFCO MAIN GATE SECURITY GUARD.

Fire Crew In charge will report to Sectional Head / Shift In charge (F&S) and assist the emergency operation as guided.

Safety of Fire Crew will be ensured by Incharge of Assisting Fire Brigade in emergency operation.

Outside organization if involved in assisting during onsite emergency.

KEY PERSONS & THEIR TELEPHONE NUMBERS (INTERNAL)**(updated in February 2024)**

NAME & DESIGNATION	OFFICE PHONE		RESIDENCE PHONE	
	INTERNAL	Mobile No.	INTERNAL	P&T
A K Sharma Executive Director	4700	9099982004	5009	236057
Ravikant Singh JGM (Utility)	4622	9099982034	5116	255116
Rajesh Ruhela JGM (Technical)	4816	8980044093	5105	255105
A V Singh JGM (Maintenance)	4731	9099030118	5111	255111
Maujilal Saw JGM (Nano)	4915	9099032670	5121	255121
S.R. Bommidi JGM (F & A)	4208	7433974761	5112	255112
Gaurav Gopal DGM (IT Services)	4630	9936501393	5108	255108
N.C. Patel DGM (F&S)	4678	9979026415	5102	255102
R K Bhatt DGM(P&A)	4211	9925010130	5114	255114
Vipin Rawat, (Rtd) Major C.S.O.	4851	9426725523	-	-
Dr. P M Sanjot CMO	5971	9979556705	5263	255263
S U Ansari DGM (NPK-I)	4694	9426931336	5117	255117
Younus Katika SM NPK-II	4543	9924949116	5207	255207
G K Amin SM (TPT)	4522	9925316819	-	262304

IMPORTANT TELEPHONE NUMBERS (EXTERNAL)
(OFF-SITE EMERGENCY PLAN)

Sl. No.	DESIGNATION OF THE AUTHORITY	OFFICE PHONE	RESIDENCE PHONE
1.	DISTRICT MAGISTRATE, BHUJ	(02832) 250020	(02832)250350
2.	DISTRICT SUPDT. OF POLICE BHUJ	(02832) 250511, 250250	(02832) 250850, 221502
3.	CHAIRMAN, KANDLA PORT TRUST	233001, 234601	233002, 234691
4.	VICE CHAIRMAN, DPT	234121	234113
5.	DISTRICT DIVISIONAL OFFICER, BHUJ	250080	
6.	DEPUTY COLLECTOR, ANJAR	243345	243363
7.	MAMLATDAR, GANDHIDHAM	221793	222875
8.	MAMLATDAR, ANJAR	242588	243362
9.	DY. SUPDT. OF POLICE, ANJAR	243254	242596
10.	POLICE INSPECTOR, GANDHIDHAM	232500	234500
11.	POLICE STATION, KANDLA	270527	270404
12.	FACTORY INSPECTOR, ADIPUR	260020	260262
13.	DY. CONSERVATOR, DPT	233585	234734
14.	TRAFFIC MANAGER, DPT	270625	235100
15.	DPT FIRE STATION	270176, 270178	238238
16.	K. S. E. Z - FIRE BRIGADE	252232	223629
17.	CIVIL DEFENCE, GANDHIDHAM	220221	-
18.	G'DHAM MUNICIPAL FIRE SERVICES	231610	-
19.	RAMBAUG HOSPITAL	220263	265266
20.	DPT HOSPITAL, KANDLA	270205	-
21.	DPT HOSPITAL ,GOPALPURI	220072	220497
22.	BHUJ CIVIL HOSPITAL	220191	220129
23.	G.E.B., GANDHIDHAM	221728	-
24.	G.E.B., ANJAR	242715, 242023	-
25.	G. W. S. S. B, GANDHIDHAM	220717, 221152	221152
26.	RLY AREA MANAGER GANDHIDHAM	221340	236237
27.	S.T. BUS STAND, GANDHIDHAM	220198	-
28.	G'DHAM CHAMBER OF COMMERCE	220735	-
29.	C. I. S. F. ,KANDLA	270208	-
30.	GPCB - REGIONAL OFFICE, BHUJ	(02832)250620	-
31.	Disaster Management Control Room, Bhuj	(02832)252347	
32.	VOPAK CRL. OLD KANDLA	270505, 270181	
33.	JRE, OLD KANDLA (IMC GROUP)	270356	
34.	UNITED STORAGE & TANKS (IMC GROUP)	271223, 271222	
35.	IMC – NEW KANDLA		-
36.	FOCT, NEAR BOOSTER	270783, 270827	235072
37.	JK SYNTHETICS	270223, 270443	
38.	N.P. PATEL TERMINAL, OLD KANDLA	270347, 270066	228807
39.	KESAR ENTERPRISE	270202	
40.	INDO NIPPON	270795, 270295	9879546836
41.	IOCL, LPG	270127, 270805	
42.	IOCL, KANDLA	233274	
43.	IOCL, FST	270264	

Report of On-Site Mock Drill carried out on

16th December 2023

09th Jan 2024

At 19:00 Hrs on 16.12.2023, the leakage was noticed by the area operator. He rushed to the Ammonia Control room with shouting gas leak, gas leak, gas leak for create more awareness in working nearby area's workmen and informed to control room In charge about the Ammonia leakage from Atmospheric Tank B pump 001 suction gland.

HAZARDOUS MATERIALS: -

Ammonia and Sulphuric acid leakage are the main hazards at our plant; we have the following storage facilities of Ammonia and Sulphuric acid at our plant.

SR NO	TYPE OF STORAGE	NOS. OF STORAGE TANK	CAPACITY OF STORAGE TANK	PRESSURE & TEMP.
1	Horton Sphere	Two	1500 MT. Each	3.2 Kg/cm ² & 0 ⁰ C.
2	Atmospheric Storage Tank	One	5,000 MT.	500 mmwc & - 33 ⁰ C.
3	Atmospheric Storage Tank	One	10,000 MT	500 mmwc & - 33 ⁰ C.
4	Atmospheric Storage Tank	One	15,000 MT	500 mmwc & - 33 ⁰ C.
5	Concentrated Sulphuric Acid Storage Tank	Two	5,000 MT.	Static Head & ambient



Leakage of Gas observed at Ammonia Tank B Pump area.



A worker got trapped in ammonia vapors near Ammonia Tank B



Water Sprinkler started at Ammonia Tank B



Fire Crew laid the new Curtain Hose near Ammonia Tank B area



Affected Person being rescued by Fire Crew



Workers assembled at Main Gate Assembly Point area.



Workers arriving at Workshop Assembly Point area



Affected Person brought to OHC.

TIME	EVENTS
19:05	The leakage was noticed. The field Incharge Mr. Brijesh Patel (Incident Controller) immediately informed to the Panel Officer and told that the working person may have entrapped in Ammonia cloud.
19:07	He also informed the shift incharge Mr. Zuber Sheikh of O/S on telephone no. 4683 and Fire Control Room on emergency telephone no. 4555 about the heavy leakage from Atmospheric Tank B pump 001 suction valve gland. He informed Fire control room about heavy leakage of Ammonia and need to declare it as a Level – 2 emergency. He also informed the Plant Dispensary to send Ambulance subsequently Shift In charge (O/S) informed to SM (Offsite) about the heavy leakage of ammonia
19:08	The message was received at Fire Control Room by Fire Shift In charge. The Fire Crew took the turn out immediately to the scene of incident. Fire Pump 01 and 03 kept on auto mode from Control room.
19:10	Site Main Controller, Shift Incharge (Utilities) Emergency siren blown as instructed by Field operator. Field incharge Mr. Sanjay Patel closed the suction valve of Atmospheric Tank B pump after wearing B A Set to minimize the concentration of Ammonia Vapor.
19:10	On hearing the siren, security in charge advised guards to stop the vehicles entering in the factory premises
19:14	After Observing the wind direction that was South-West to North-West direction the Foam Tender & Ambulance reached at Emergency site through Safe Rescue Route, the Fire Vehicles & Ambulance were parked at safe place with safe distance from the Ammonia leakage area.
19:17	The Fire crews started the work for finding the affected person and diluting the ammonia vapors by spraying water through one fixed monitor from the fire hydrant line after the consulting with incident controller.
19:19	Our rescue team member after wearing the Breathing Apparatus set approached the ammonia cloud area, removed the affected person from harmful area and laid him on ambulance stretcher.
19:21	People gathered at assembly points i.e. Workshop, NPK K-II ground floor and Bus Stand.
19:25	The First affected person Mr. Dinesh reached at Plant Dispensary. Ambulance was sent back at incident site for taking another affected person.
19:28	Rescue team members reported to Site Main Controller that there were no more affected persons found in the area and Site Main Controller declares that there were no more affected persons on the Incident site.
19:33	The operators came out and reported that the Ammonia leakage has completely stopped. The Contaminated toxic vapors of Ammonia were diluted by spraying water. Representative from Laboratory checked concentration of ammonia in the area. On receiving instructions from Site Main Controller to Fire and Safety supervisor water spraying was stopped.
19:35	Site Main Controller reported to Chief Emergency Controller that leakage is arrested and there is no more toxic concentration hazard in the atmosphere and the emergency is over.
19:37	Site Main Controller Shift Incharge (Offsite) asked to blow all clear siren and accordingly all clear siren was blown for Two Minutes continuously from Fire Control Room.

TIME	EVENTS
19:40	Ambulance returned to the dispensary as there were no affected persons as informed by the Incident Controller.
19:50	Fire Tender with crew reached Fire Station.

The following points were observed during the mock drill and need to be rectified/improved:

- Around 130 No. s of employees including contractor workmen gathered at different assembly points.
- Awareness among the operating staff to be improved regarding their role in emergency.
- Contractor workmen and employees of Product Handling department were observed working even after emergency was declared.
- No buses were available at the plant at the time of emergency, that is why the bus didn't arrive at any of the assembly points.

N.C. Patel

Dy. General Manager (F&S)

FORM NO. 37
(Prescribed under Rule 12-B)

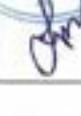
Register containing particulars of monitoring of working environment required under Section 7-A(a)(e).

- 1 Name of the Department/Plant.: **M/s. Indian Farmers Fertilizer Co. Ltd.**
Kandla Unit, Kutch, 372010.
- 2 Raw materials, by-products and finished Products involving in the process: **Phosphoric Acid, Ammonia, NP / NPK Fertilizers**
- 3 Date Of Sampling: **06/03/2024.**
- 4 Particulars of sampling: **as per below table**

Sr. No.	Location/ Operation Mentioned	Identified cortaminant	Sampling instrument used	Airborne Contamination		Average	TWA concentration (As given in second schedule)	Reference method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in block letter)
				Number of samples	Range							
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Air Compressor	Noise	Sound Level Meter	1 No.	db(A)	82.4	85	Electronics Instrument method	4	Complied		SANDIP PATEL
2.	Ammonia Compressor House	Noise	Sound Level Meter	1 No.	db(A)	78.5	85	Electronics Instrument method	1	Complied		SANDIP PATEL
3.	Dryer Floor AB Train	Noise	Sound Level Meter	1 No.	db(A)	79.2	85	Electronics Instrument method	5	Complied		SANDIP PATEL

FORM NO. 37
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A(a)(e).

4.	Dryer Floor CD Train	Noise	Sound Level Meter	1 No.	db(A)	81.5	85	Electronics Instrument method	3	Complied		SANDIP PATEL
5.	Dryer Floor EF Train	Noise	Sound Level Meter	1 No.	db(A)	80.6	85	Electronics Instrument method	5	Complied		SANDIP PATEL
6.	HAG (K-1)	Noise	Sound Level Meter	1 No.	db(A)	81.6	85	Electronics Instrument method	3	Complied		SANDIP PATEL
7.	HAG (K-II)	Noise	Sound Level Meter	1 No.	db(A)	81.3	85	Electronics Instrument method	3	Complied		SANDIP PATEL
8.	Mechanical Workshop	Noise	Sound Level Meter	1 No.	db(A)	75.9	85	Electronics Instrument method	5	Complied		SANDIP PATEL
9.	Up Plant	Noise	Sound Level Meter	1 No.	db(A)	69.2	85	Electronics Instrument method	3	Complied		SANDIP PATEL
10.	WSF Plant	Noise	Sound Level Meter	1 No.	db(A)	71.8	85	Electronics Instrument method	3	Complied		SANDIP PATEL

As per NIOSH (REL) Exposure Limit,

FORM NO. 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A(a)(e).

- 1 Name of the Department/Plant.: **M/s. Indian Farmers Fertilizer Co. Ltd.**
Kandla Unit, Kutch, 372010.
- 2 Raw materials, by-products and finished Products involving in the process: **Phosphoric Acid, Ammonia, NP / NPK Fertilizers**
- 3 Date Of Sampling: **06/03/2024 (09:59Hrs.)**
- 4 Particulars of sampling: **as per below table**

Sr. No.	Location/ Operation Mentioned	Identified contaminant	Sampling instrument used	Airborne Contamination		Average	TWA concentration (As given in second schedule)	Reference method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in block letter)
				Number of samples	Range							
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Between Horton Spheres	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	6.4	35*	OSHA ID-188	3	Complied		Jay Dhobi
2.	Near Granulator 'A' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	4.3	35*	OSHA ID-188	2	Complied		Jay Dhobi
3.	Near Granulator 'B' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	3.8	35*	OSHA ID-188	3	Complied		Jay Dhobi

FORM NO. 37

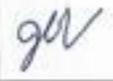
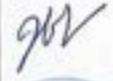
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A(a)(e).

4.	Near Granulator 'C' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	6.2	35*	OSHA ID-188	3	Complied	<i>gn</i>	Jay Dhobi
5.	Near Granulator 'D' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	3.1	35*	OSHA ID-188	2	Complied	<i>gn</i>	Jay Dhobi
6.	Near Granulator 'E' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	8.4	35*	OSHA ID-188	5	Complied	<i>gn</i>	Jay Dhobi
7.	Near Granulator 'F' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	11.5	35*	OSHA ID-188	4	Complied	<i>gn</i>	Jay Dhobi
8.	Near NH ₃ Storage Tank - A	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	2.3	35*	OSHA ID-188	4	Complied	<i>gn</i>	Jay Dhobi
9.	Near NH ₃ Storage Tank - B	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	1.7	35*	OSHA ID-188	2	Complied	<i>gn</i>	Jay Dhobi
10.	Near NH ₃ Storage Tank - C	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	2.3	35*	OSHA ID-188	4	Complied	<i>gn</i>	Jay Dhobi

FORM NO. 37
 (Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A(a)(e).

11.	Near PN Tank 'A' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	4.6	35*	OSHA ID-188	2	Complied		Jay Dhobi
12.	Near PN Tank 'B' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	6.6	35*	OSHA ID-188	2	Complied		Jay Dhobi
13.	Near PN Tank 'C' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	5.6	35*	OSHA ID-188	3	Complied		SANDIP PATEL
14.	Near PN Tank 'D' Train	Ammonia	Gaseous Analyzer	1 No.	mg/Nm ³	4.7	35*	OSHA ID-188	1	Complied		Jay Dhobi

* As per OSHA (PEL) Exposure Limit,



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Kandla Unit

Annexure-XII

Details of stock of toxic/hazardous raw material with quantity at IFFCO Kandla

Raw Material /Hazardous Chemicals	Type of Storage Tanks	Storage Capacity	Closing Stock as on 31.03.2024
Ammonia	Insulated Horton Sphere, Stored at 3.0 Kg/cm ²	Two Horton spheres of capacity 1500 MT each	20298.367 MT
	Double Wall Double Integrity Atmospheric Ammonia Storage Tanks	Tank-A: 10000 MT Tank-B: 5000 MT Tank-C: 15000 MT	
	Total	33,000 MT	
Phosphoric acid	Vertical Cylindrical MSRL Storage Tanks	10 Nos. of Tanks of capacity 10,000 MT Bulk each.	25223.383 MT (As 100% P ₂ O ₅)
	Total	1,00,000 MT Bulk	
Concentrated Sulphuric Acid	Vertical Cylindrical Mild Steel Storage Tank	2 Nos. of tanks of capacity 5,000 MT each	7455.121 MT
	Total	10,000 MT	
LSHS	Vertical Cylindrical Mild Steel Storage Tanks	2 nos. of tanks of capacity 391 KL and 250 KL	213.670 MT
	Total	641 KL	
HCl	Vertical Cylindrical Mild steel Storage Tanks	2 Nos. of tanks of capacity 38 MT each	23.690 MT
	Total	76 MT	
Caustic Soda Lye	Vertical Cylindrical Stainless Steel Tank	1 Tank of capacity 68 MT	22.878 MT
Diesel	Underground Storage Tanks	2 Nos. of underground Storage Tank of capacity 20 KL each	17.360 KL
	Total	40 KL	

INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
KANDLA UNIT

Refresher Training on Operation of Fire & Safety Equipments

23rd February 2024

Different types of Fire & Safety Equipments have been installed within our plant according to the requirement. Most of them are meant for tackling small Fires/Gas leakage at its starting stage. In case of failure to control the emergency at its incipient stage the emergency may spread at a very rapid rate and may cause unpredictable loss to life & property. The prevention of small fire / Gas leak at workplace is possible only by the employees working in that area. Looking to this proper training for correct use of these Fire & Safety equipments was scheduled from 03/02/2024 to 15/02/2024 in different locations of plant area so that emergency can be controlled in its starting stage & we can handle any emergency more confidently.

Active participation of Employees and Contract Workmen was shown in refresher training. Some glimpses are as below: -



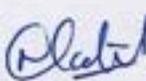






Total presence of Employees & Contract Workmen is shown below.

Sr. No	Employees working in	Location of Demonstration	Date	Employees	Contractor Workmen
1.	NPK (K-I)	Near CD Train Control room	3.2.2024	41	30
2.	NPK (K-II)	Near EF Train Control room	4.2.2024	15	33
3.	Product Handling	PH 1 st floor near Control Room	5.2.2024	12	29
4.	OffSite (K-I), MRSS (K-I)	In front of Offsite (K-I) office.	6.2.2024	15	15
5.	Offsite (K-II), NPK (Mech/Maint) K-II	Near NPK (Mech/Maint) K-II office	7.2.2024	11	10
6.	Mech/Maint (Offsite)	In front of Mech/Maint (Offsite)-K-I	7.2.2024	10	08
7.	Ammonia Storage	New Ammonia Storage area	8.2.2024	11	34
8.	Store(K-I), NPK (Mech/Maint)-K-I, Workshop, Laboratory	In front of Store (K-I)	9.2.2024	15	02
9.	Elect (K-I), Inst (K-I), Auto workshop	Near Elect Workshop (K-I)	9.2.2024	20	04
10.	Nirman Bhavan, Inst (K-II) Training Center, Elect (K-II)	In front of Nirman Bhavan	10.2.2024	04	20
11.	Technical Building	In front of Technical Building	10.2.2024	13	00
12.	Security, Time Office, Medical	In front of Security Main Gate.	12.2.2024	02	10
13.	Talwar Bhavan	In front of Talwar Bhavan	12.2.2024	08	05
14.	Zinc Sulphate & Urea Phosphate, HAG K-II Plant	Between both Plants	13.2.2024	05	36
15.	Contractor Shed	In front of Contractor Shed	14.2.2024	00	42
16.	Mechanical PH	Near Bagging Maint office	14.2.2024	05	06
Township					
17.	Security	Main Gate	15.2.2024	00	19
18.	Estate, Electrical	Estate Office		01	21
19.	Guest House	Guest House		01	01
20.	Dispensary	Dispensary		04	02
TOTAL				193	327


N C Patel
 Dy. General Manager (F&S)

INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
KANDLA UNIT

Refresher Training on Operation of Fire & Safety equipments

26th Jul, 2023

Different types of Fire & Safety Equipments have been installed within our plant according to the requirement. Most of them are meant for tackling small Fires/Gas leakage at its starting stage. In case of failure to control the emergency at its incipient stage the emergency may spread at very rapid rate and may cause unpredictable loss to life & property. The prevention of small fire / Gas leak at work place is possible only by the employees working in that area. Looking to this proper training for correct use of these Fire & Safety equipments was scheduled from 06/07/2023 to 12/07/2023 in different locations of plant area so that emergency can be controlled in its starting stage & we can handle any emergency more confidently.

Active participation of Employees and Contract Workmen was shown in refresher training. Some glimpses are as below:-



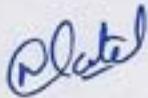




Total presence of Employees & Contract Workmen is shown below

Sr. No	Employees working in	Location of Demonstration	Date	Employees	Contractor Workmen
1.	NPK (K-I)	Near CD Train Control room	06.06.2023	29	38
2.	NPK (K-II)	Near EF Train Control room	09.06.2023	14	12
3.	Bagging	Bagging floor near Control Room	10.06.2023	12	35
4.	OffSite (K-I), MRSS (K-I)	In front of Offsite (K-I) office.	12.06.2023	06	10
5.	OffSite (K-II), NPK (Mech/Maint) K-II	Near NPK (Mech/Maint)-K-II office	30.06.2023	09	09
TOTAL				70	104

Note : Training was discontinued due to Tropical Cyclone Biparjoy and Overcast weather afterwards.



N C Patel
Dy.General Manager (F&S)

Soni Group of Technologies – Environmental Testing Laboratory
Test Report / Certificate
Noise Level Monitoring

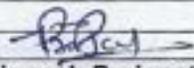
Name and address of customer	M/s. Indian Farmers Fertilizer Co. Ltd, Kandla Unit, Kutch, 372010.		
Report / Certificate No.	SGT/N/03/033/23-24	Date of Issue	14/03/2024
Time of Sampling	13:15to 14:10Hrs 20:18 to 21:00 Hrs.	Sample Identification no.	SGT/ N/03/033
Sample description	Noise Level		
Sampling By	Jay Bhai		
Date of Sampling	07/03/2024		
Sampling Method	IS 11702		
Sampling Instrument	Sound Level Meter		

Test Results

Sr. No	Name of Location	DAY TIME MONITORING		Night Time Monitoring	
		dB(A)	Norms dB(A)	dB (A)	Norms dB(B)
1.	Nr. Main Gate	66.2	75	61.7	70
2.	Nr. STP	68.9	75	63.8	70
3.	Nr. Admin Building	59.2	75	54.3	70
4.	Nr. Boiler	73.8	75	68.2	70
5.	Nr. Training Centre	67.3	75	61.8	70
6.	Nr. R & D Lab	68.4	75	64.6	70
7.	Nr. Coal Storage Area	58.1	75	54.1	70

Remarks →

- Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- Sample will be disposed after 15 days from the date of issue of the report unless agreed with the customer.
- Opinion & Interpretation is not given.
- Decision rule is not applicable.

	
Mr. Jignesh Prajapati Chemist Tested By	Mr. Sandip Patel Technical Manager Reviewed and Approved By



IFFCO

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इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड

INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

Dated: 05.03.2024

To,
The District Collector,
Collector's Office, Bhuj- Kutch.

Reference:

Environment Clearance by MoEF&CC vide Letter No. J-11011/202/2009-IA-II(I) dated 27.02.2024.

Subject: Request to display of Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024 granted for "Proposed addition of Nano-Fertiliser (Nano DAP) in existing Fertiliser Unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District -Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative (IFFCO) under the provision of the EIA Notification 2006-regarding.

Respected Sir/Madam,

We wish to inform you that MoEF&CC has granted Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024. As per the directive of this clearance, General Conditions clause no. 32, the clearance letter is to be displayed for 30 days from the date of receipt and the same is being attached. It is also available at Ministry Website- <https://parivesh.nic.in>.

Hence, we hereby earnestly request to kindly display the same.

Thanking You,
Yours Faithfully,



Authorized Signatory
Indian Farmers Fertiliser Cooperative (IFFCO)

A.K. SHARMA
EXECUTIVE DIRECTOR
INDIAN FARMERS FERTILISER COOPERATIVE LTD.
KANDLA (KUTCH) GUJARAT-370210 (INDIA)

05/03/2024
रजिस्ट्री (ऑफिस) शाखा.
कलेक्टर कचेरी.
भुज-कच्छ.

IFFCO

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KANDLA UNIT

इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड

INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

Dated: 05.03.2024

To,
The General Manager,
District Industry Centre,
Bhuj- Kutch.

Reference:

Environment Clearance by MoEF&CC vide Letter No. J-11011/202/2009-IA-II(I) dated 27.02.2024.

Subject: Request to display of Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024 granted for "Proposed addition of Nano-Fertiliser (Nano DAP) in existing Fertiliser Unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District -Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative (IFFCO) under the provision of the EIA Notification 2006-regarding.

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Authorized Signatory
Indian Farmers Fertiliser Cooperative (IFFCO)

A.K: SHARMA
EXECUTIVE DIRECTOR
INDIAN FARMERS FERTILISER COOPERATIVE LTD
KANDLA (KUTCHCHH) GUJARAT-370210 (INDIA)



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

BUREAU VERITAS
Certification



कांडला इकाई / Kandla Unit, कांडला / Kandla, कच्छ / Kutch, (गुजरात) / (Gujarat) - 370 210.
फोन / Phones : 02836 - 254000, 270381, 270382, फेक्स / Fax : 028036 - 270642
E-mail : iffco_kandla@iffco.in • Website : www.iffco.in • [IFFCO_PR](#) • [IFFCO.COOP](#)

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KANDLA UNIT**इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड**
INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

Dated: 05.03.2024

To,
The District Development Officer,
Bhuj- Kutch.

Reference:

Environment Clearance by MoEF&CC vide Letter No. J-11011/202/2009-IA-II(I) dated 27.02.2024.

Subject: Request to display of Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024 granted for "Proposed addition of Nano-Fertiliser (Nano DAP) in existing Fertiliser Unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District -Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative (IFFCO) under the provision of the EIA Notification 2006-regarding.

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A.K. SHARMA
EXECUTIVE DIRECTOR
INDIAN FARMERS FERTILISER COOPERATIVE LTD.
KANDLA (KUTCHHH) GUJARAT-370210 (INDIA)


6/3/24
आवक क्र. 24
कचड़ा पंचायत, कच्छ-गुज

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

BUREAU VERITAS
Certification



कांडला इकाई / Kandla Unit, कांडला / Kandla, कच्छ / Kutch, (गुजरात) / (Gujarat) - 370 210.
फोन / Phones : 02836 - 254000, 270381, 270382, फेक्स / Fax : 028036 - 270642
E-mail : iffco_kandla@iffco.in • Website : www.iffco.in •  IFFCO_PR •  IFFCO.COOP

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KANDLA UNIT**इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड**
INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

Dated: 05.03.2024

To,
The Taluka Development Officer,
Gandhidham, District -Kutch.

Reference:

Environment Clearance by MoEF&CC vide Letter No. J-11011/202/2009-IA-II(I) dated 27.02.2024.

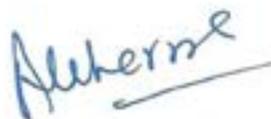
Subject: Request to display of Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024 granted for "Proposed addition of Nano-Fertiliser (Nano DAP) in existing Fertiliser Unit with production capacity of 36500 kL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District -Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative (IFFCO) under the provision of the EIA Notification 2006-regarding.

Respected Sir/Madam,

We wish to inform you that MoEF&CC has granted Environment Clearance vide Letter No. J-11011/202/2009-IA-II(I) dated 27.03.2024. As per the directive of this clearance, General Conditions clause no. 32, the clearance letter is to be displayed for 30 days from the date of receipt and the same is being attached. It is also available at Ministry Website- <https://parivesh.nic.in>.

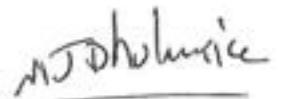
Hence, we hereby earnestly request to kindly display the same.

Thanking You,
Yours Faithfully,



Authorized Signatory
Indian Farmers Fertiliser Cooperative (IFFCO)

A.K. SHARMA
EXECUTIVE DIRECTOR
INDIAN FARMERS FERTILISER COOPERATIVE LTD
KANDLA (KUTCHCHH) GUJARAT-370210 (INDIA)


5/3/24
तालुका पंचायत इंधिरी
गंधिधाम - ३७७

IFFCOWholly owned by Cooperatives
KANDLA UNIT**इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड**
INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

Dated: 05.03.2024

To,
RO-Integrated Regional Office,
Ministry of Environment, Forest and Climate Change,
Room No. 407, Aranya Bhawan, Near CH-3 Circle,
Sector-10 A, Gandhinagar, Gujarat-382010.

Reference:

Environment Clearance by MoEF&CC vide Letter No. J-11011/202/2009-IA-II(I) dated 27.02.2024.

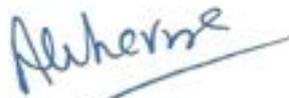
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Yours Faithfully,



Authorized Signatory
Indian Farmers Fertiliser Cooperative (IFFCO)

A.K. SHARMA
EXECUTIVE DIRECTOR

INDIAN FARMERS FERTILISER COOPERATIVE LTD.

KANDLA (KUTCH) GUJARAT-370210 (INDIA)

कांडला इकाई / Kandla Unit, कांडला / Kandla, कच्छ / Kutch, (गुजरात) / (Gujarat) - 370 210.

फोन / Phones : 02836 - 254000, 270381, 270382, फेक्स / Fax : 028036 - 270642

E-mail : iffco_kandla@iffco.in • Website : www.iffco.in • [IFFCO_PR](https://www.facebook.com/IFFCO.COOP) • [IFFCO.COOP](https://www.facebook.com/IFFCO.COOP)

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

BUREAU VERITAS
Certification



IFFCOWholly owned by Cooperatives
KANDLA UNIT

इंडियन फार्मर्स फर्टिलाइजर कोऑपरेटिव लिमिटेड

INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED

(By Courier)

13th April 2024

To
The Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan
Sector 10-A
Gandhinagar – 382 010
GUJARAT

Sub: Environmental Statement in Form-V for the year ending 31st March-24

Dear Sir,

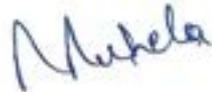
With reference to the subject matter enclosed please find herewith the Environmental Statement for the period from 1st April-2023 to 31st March-2024 in the prescribed Form-V complete in all respects in compliance with Rule 14 of the Environment (Protection) Amendment Rules, 1992.

Hope you will find the same in order.

Thanking you,

Yours faithfully,

For Indian Farmers Fertilizer Cooperative Limited,



Rajesh Ruhela
Jt. General Manager (Technical)

Encl: as above

FORM -V

(as per rule 14 of The Environment (Protection) Rules, 1986)

Environmental Statement for the financial year ending the 31st March 2024.**P A R T - A**

- (i) Name and address of the Owner/ occupier of the Industry, operation or Process. : **INDIAN FARMERS FERTILISER CO-OP. LTD.
KANDLA UNIT, KUTCH DISTRICT
P.O. KANDLA, GUJARAT - 370 210.**
- (ii) Industry Category
Primary - (STC code) :
Secondary - (SIC code) : State Industries Commissionerate Code = 041100300 00.
- (iii) Production Capacity
(in terms of MT of P₂O₅) : 910,000 MTPA
- (iv) Year of establishment : 1974
- (v) Date of the last Environmental Statement submitted : 29th May 2023

PART - B**Water and Raw Material consumption**(i) Water consumption in m³/day & consumption per MT of product:

Water consumed in	Water consumption in m ³ /day	
	During the current financial year 2022-23	During the current financial year 2023-24
Process	763	777
Cooling	120	120
Domestic	230	230
Total	1113	1127

Name of the products	Water consumption per MT of product	
	During the current financial year 2022-23	During the current financial year 2023-24
Phosphatic fertilisers of the following grades		
Grade 10:26:26	0.119943	0.177006
Grade 12:32:16	0.134230	0.165079
DAP 18:46:00	0.158461	0.200919

(ii) Raw Material Consumption:**a) Consumption during the Financial Year 2022-23:**

Raw Materials	Products	Unit	Consumption per MT of product		
			10:26:26	12:32:16	18:46:00
Phos. acid (as 100 % P ₂ O ₅)	NPK 10:26:26	MT	0.2644	0.3261	0.4698
Ammonia		MT	0.1145	0.1396	0.2109
MAP	NPK 12:32:16	MT	-	-	-
Urea		MT	0.0143	0.0134	0.0173
Potash	DAP 18:46:00	MT	0.4358	0.2679	-
Filler		MT	0.0263	0.0649	0.0353
Sulphuric acid		MT	0.0103	0.0125	0.0145

b) Consumption during the Current Financial Year 2023-24:

Raw Materials	Products	Unit	Consumption per MT of product		
			10:26:26	12:32:16	18:46:00
Phos. acid (as 100 % P ₂ O ₅)	NPK 10:26:26	MT	0.2604	0.3205	0.4608
Ammonia		MT	0.1162	0.1389	0.2110
MAP	NPK 12:32:16	MT	-	-	-
Urea		MT	0.0114	0.0147	0.0174
Potash	DAP 18:46:00	MT	0.4344	0.2674	-
Filler		MT	0.0324	0.0549	0.0318
Sulphuric acid		MT	0.0114	0.0115	0.0137

PART - C

(i) **Pollution Discharged to the Environment / Unit of output: (Parameters are as specified in the consent issued) for 2023-24:**

Pollutant	Nature	Parameter	Limit as specified in the Consent Order	Quantity of pollutant discharged (kgs/day)	Actual Avg. concentration of pollutants in discharge (mg/L)	Percentage variation from prescribed standard with reasons
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) Water	Industrial Effluents	Nil	Not Applicable	Not Applicable	Not Applicable	Not Applicable
(b) Water	Domestic Sewage Water	TSS (mg/L)	Less Than 100	Treated domestic water of around 200 to 250 m ³ /day is reused in the process and for horticulture purpose.	73.00	Concentration of pollutants in treated domestic sewage water are well within the specified limits
		BOD In (mg/L) For 3 days at 27 °C	Less Than 30		26.83	
		Fecal Coliform (MNP/100 ml)	Less Than 1000		0.00	
		pH	6.5 - 9.0		7.82	

Note: 1. Actual concentration of all the pollutants are well within the limits specified in the Common Consent Order issued by GPCB.

2. Concentration of pollutants as shown in Col. (6) are averages taken from the monthly analysis reports that are submitted regularly to GPCB.

Air Emission details for the NPK Process Plant Stack and the Boiler Stack for 2023-24:

Pollutants	Nature	Parameters	Limits as specified in the Consent Order	Actual Quantity of pollutants in Air emissions (MT/day)	Actual Concentration of pollutants in Air emissions (mg/NM3)	Percentage variation from prescribed standard with reasons
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(c) Air	Emissions from Process plant stacks	Ammonia (mg/NM3)	175	1.16	30.80	Concentration of all the pollutants in air emissions are well within the specified limits
		SPM (mg/NM3)	150	2.47	64.23	
		Fluorides (mg/NM3)	10	0.03	0.68	
	Emission from Boiler Stack	SPM (mg/NM3)	150	0.0410	106.85	
		SOx (ppm)	100	0.0275	71.49	
		NOx (ppm)	50	0.0146	38.01	

- Note : 1. Actual concentration of all pollutants are well within the limits specified in the Consent Order issued by GPCB.
2. Concentration of pollutants as shown in Col. (6) are averages taken from the monthly analysis reports that are submitted regularly to GPCB.

P A R T - D
Hazardous Wastes

(as specified under the Hazardous Wastes Management & Handling Amendment Rules, 2002).

Hazardous wastes	Total quantity generated in Liters	
	During the current financial year 2022-23	During the current financial year 2023-24
(a) From process plant	Not applicable	Not applicable
(b) From pollution control facilities	Not applicable	Not applicable
(c) From use of lubricating, system & transformer oil. Total stock as on 31 st March	6.300 MT spent oil generated and the stock as on 31.03.2023 is 1.718 MT. 2.100 MT of Spent oil is used for lubrication of Flight conveyors, railway siding etc. 8.973 MT of oil sold to GPCB registered recycler.	9.164 MT of spent oil generated and the stock as on 31.03.2024 is 0.955 MT. 9.927 MT of oil sold to GPCB registered recycler.

Note: Presently the spent oil is being used internally in lubrication of Flight conveyors, railway siding etc.

P A R T - E**Solid Wastes**

Solid wastes	Total quantity generated in Kgs.	
	During the previous financial year	During the current financial year
(a) From process plant	No solid mud on dry basis has been generated from the manufacturing of Zinc Sulphate monohydrate plant as the plant is shutdown.	No solid mud on dry basis has been generated from the manufacturing of Zinc Sulphate monohydrate plant as the plant is shutdown.
(b) From pollution control facilities	Dried sludge consisting of only organic matter, obtained from the domestic sewage treatment plant. Maximum quantity generated is approximately 7 kgs/day.	
(c) Quantity recycled or re-used	Entire quantity of sludge from domestic sewage treatment plant is dried in sludge drying beds and dried sludge is used as manure for horticulture within the factory premises.	
(d) Quantity sold	Nil	
(c) Quantity disposed	This year Plant was shutdown due to Non availability of zinc ash. Hence Zinc mud generation quantity was nil. Total 0 MT of solid mud on dry basis was disposed to GPCB registered recycler M/s. Detox India Pvt limited during the year 2023-24	

P A R T - F

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

- Hazardous Wastes : Used oil comprising of lubricating system & transformer oil which is generated from routine maintenance activity is presently being used internally in lubrication of Flight conveyors, railway siding etc.
- Solid Waste from process plant : Solid mud which is generated from the manufacturing of Zinc Sulphate monohydrate product is properly disposed to GPCB registered recycler M/s. Detox India Pvt ltd.
- From pollution control facilities : Dry domestic sewage sludge is periodically removed from the sludge drying beds and used as manure or for landfill purposes within the factory premises. This consists of only dry organic matter. Maximum quantity of sludge generated is approximately 7 kgs/ day.

P A R T - G

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

Better operation and control practices, modernization of instrumentation system i.e. installation of Distribution Control System (DCS) and installation of additional scrubber in the oldest stream has helped in reducing the ammonia & particulate matter emission thereby improving the recovery of nutrients, as a result consumption efficiency of raw materials has improved. Emissions of ammonia from stacks have been reduced considerably. This has been achieved by carrying out minor modifications in the scrubbing system, proper maintaining of process parameter & removing bottlenecks, thereby recovering valuable nutrients from the stack gases. It has also helped in reducing the fertiliser dust emissions.

During operation of the plant all efforts are taken to minimize waste generation and for preservation of resources. Spillages from all around the plant are collected in a central sump and recycled back to the process. The sludge containing nutrients that settles in the network of drains is also recovered and recycled into the process as it contains valuable fertiliser nutrients.

IFFCO Kandla is first industry in Gujarat for implementing the online continuous Emission Monitoring System for ammonia in stack of all six streams. HF monitoring system has also been installed and commissioned in all trains. This has helped in control of scrubber operations. PTZ (Pan Tilt Zoom) camera & flowmeter have been installed in the trench for monitoring/viewing effluent discharge. It has been commissioned and connected to CPCB server.

Treated domestic sewage water is used for gardening purpose and this has helped in reducing the total quantity of water that has to be purchased. This also helps in conservation of water in this region of scarcity.

Green Belt Development: The company has endeavored in maintaining eco-balance by way of tree plantation within the plant premises and development of green belt all around the plant. Extensive plantation is carried out every year, however the survival rate of plants are very low. On going efforts are made to plant additional trees every year. The up-gradation and capacity increase of the domestic sewage treatment plant has helped in increasing greenery within the factory premises by making available sufficient amounts of treated water, which is very scarce in this region. Dry sewage sludge is used for the trees and is helping in reducing the problem of high soil salinity.

Regular monitoring of noise is carried out at various locations in the plant. These measurements show that the noise levels are within the specified limits, wherever the noise levels are high special protective equipment like ear muffs are provided to all persons working in the area.

Scrap materials of various types are reclaimed from various locations in the plant and then stacked properly in its designated place and is disposed off through M/s. mjunction.

Training programmes are conducted all round the year and training is imparted to all employees on Environment Management System, Environment Protection and Prevention of Pollution.

P A R T - H

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

Investment towards environment protection has been done in the development of green areas within the factory premises as well as in the surrounding areas of the city by planting of trees.

Other expenditure towards environmental protection and abatement of pollution is incurred for maintenance of equipment and periodic replacements at the domestic sewage water treatment plant and of pollution control equipment in the process plant.

Third Party Environment Audit is carried out annually through an auditor recognized by GPCB for this purpose as per the directives of the Hon. Gujarat High Court & directives from GPCB. The Audit reports are submitted to GPCB.

P A R T - I

Any other particulars for improving the quality of the environment.

(a) ISO Certification:

IFFCO Kandla unit has designed an Environment Management System according to International standard. IFFCO Kandla unit is certified for Integrated Management System (IMS) combining the Quality Management System (ISO 9001:2015), Environment Management System (ISO 14001:2015), Occupational Health & Safety Management System (ISO 45001:2018) and Energy Management System (ISO 50001:2018). Our Environment Policy contains the principle of compliance with all environmental legislations.

The salient features of the Environment Management System are as follows:

1. To implement appropriate Environment Management System.
2. To comply with all applicable environmental and other legislation and endeavor to improve upon them in a prudent manner with good business sense.
3. To promote sustainable development through better operating practices that would reduce pollution, minimize waste and optimize utilization of resources.

(b) Efforts to Conserve Water :

1. The Kutch district where Kandla plant is located suffers from perennial water shortage. Hence IFFCO takes all measures to reduce the consumption of water. It also undertakes various projects to ease the problem of scarce water availability. In order to reduce the water consumption and yet to maintain the greenery at the plant site and township, schemes for reuse of treated domestic sewage water at plant and township was envisaged and implemented successfully.
2. Rain water recharging well has been built at the township with a storage pond for conserving rain water which have been effective in reducing the salinity in the underground water table in the township and its neighboring areas.
3. Construction of Check Dams: A number of check dams in various villages have been constructed to avoid the flow of rain water to the sea in this region of scarce water. The purpose of the check dam is to reduce the salinity of the ground water, improve the ground water table, and make water available to the villagers even after the monsoon season is over.
4. Rain water storage pond of capacity 3,300 M³ and 20,000 M³ has been constructed at IFFCO Township to avoid channeling of water and to maintain water table of the area.
5. Providing / maintenance of drinking and irrigation water lines at Panthia village adopted by IFFCO under the village adoption programmes, so that it can be better utilized & wastage of water is minimized.

Date: 13.04.2024
Place: Kandla


Rajesh Ruhela
Jt. General Manager (Technical)

તા. ૦૧-૦૩-૨૦૨૪

કરણ લેટર

IFFCO

::: જાહેર સૂચના :::

તમામ સંબંધિત વ્યક્તિઓને આથી જાણ કરવામાં આવે છે કે પ્રોજેક્ટ "પ્રસ્તાવિતનેનો ખાતર(નેનો ડીએપી) હાલના ખાતર એકમમાંપ્રતિ વર્ષ ૩૬૫૦૦ KL ઉત્પાદન સમતા ધરાવતાનો પ્રસ્તાવિત ઉમેરો બોક્સ નંબર 12, કંડલા, જિલ્લો-કચ્છ, ગુજરાત મેસર્સ ઈન્ડિયન ફાર્મર્સ ડેવેલપ્મેન્ટ કો.ઓપરેટીવ લિમિટેડ (IFFCO)" F.No. J-11011/202/2009-IA. II(I) દ્વારા પર્યાવરણીય મંજૂરી, 27મી ફેબ્રુઆરી 2024, પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલય, ભારત સરકાર દ્વારા આપવામાં આવી છે અને મંજૂરી પત્રની નકલો MoEF&CC પાસે ઉપલબ્ધ છે અને તે અહીં પણ જોઈ શકાય છે <https://parivesh.nic.in/>.

ગુજરાત સપ્તાહ

શનિવાર, ૨ માર્ચ,

જાહેર સૂચના

તમામ સંબંધિત વ્યક્તિઓને આથી જાણ કરવામાં આવે છે કે પ્રોજેક્ટ 'પ્રસ્તાવિત નેનો ખાતર (નેનો ડીએપી) હાલના ખાતર એકમમાં પ્રતિ વર્ષ 36500 KL ઉત્પાદનક્ષમતા ધરાવતા નો પ્રસ્તાવિત ઉમેરો બોક્સ નંબર 12. કંડલા, જિલ્લો-કચ્છ, ગુજરાત મેસર્સ ઈન્ડિયન ફાર્મર્સ ફર્ટિલાઈઝર કોઓપરેટિવ લિમિટેડ (IFFCO)' ને F.No. J-11011/202/2009-IA.II(I) દ્વારા પર્યાવરણીય મંજૂરી, 27મી ફેબ્રુઆરી 2024, પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલય, ભારત સરકાર દ્વારા આપવામાં આવી છે અને મંજૂરી પત્રની નકલો MoEF&CC પાસે ઉપલબ્ધ છે અને તે અહીં પણ જોઈ શકાય છે.

<https://parivesh.nic.in/>

શનિવાર, તા. ૦૨-૦૩-૨૦૨૪

પત્ર નહીં મિત્ર

કચ્છમિત્ર

જાહેર સૂચના

તમામ સંબંધિત વ્યક્તિઓને આથી જાણ કરવામાં આવે છે કે પ્રોજેક્ટ “પ્રસ્તાવિત નેનો ખાતર (નેનો ડીએપી) હાલના ખાતર એકમમાં પ્રતિ વર્ષ ૩૬૫૦૦ KL ઉત્પાદન ક્ષમતા ધરાવતાનો પ્રસ્તાવિત ઉમેરો બોક્સ નંબર ૧૨, કંડલા, જિલ્લો-કચ્છ, ગુજરાત મેસર્સ ઈન્ડિયન ફાર્મર્સ ફર્ટિલાઈઝર કોઓપરેટિવ લિમિટેડ (IFFCO)” ને F.NO. J-11011/202/2009-IA.II(I) દ્વારા પર્યાવરણીય મંજૂરી, ૨૭મી ફેબ્રુઆરી ૨૦૨૪, પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલય, ભારત સરકાર દ્વારા આપવામાં આવી છે અને મંજૂરી પત્રની નકલો MoEF&CC પાસે ઉપલબ્ધ છે અને તે અહીં પણ જોઈ શકાય છે <https://parivesh.nic.in/>.

THE TIMES OF INDIA, AHMEDABAD/RAJKOT
SATURDAY, MARCH 2, 2024

PUBLIC NOTICE

All the concerned persons are hereby informed that the project "**Proposed addition of Nano-fertilizer (Nano DAP) in existing Fertilizer unit with production capacity of 36500 KL per year located at Kandla Unit at P.O. Box No. 12, Kandla, District-Kutch, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO)**" has been accorded environmental clearance vide F.No. J-11011/202/2009-IA.II(I) dated 27th February 2024 by the Ministry of Environment, Forest & Climate Change, Govt of India and copies of the clearance letter are available with the MoEF&CC and may also be seen at Website of the Ministry at <https://parivesh.nic.in/>.

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PUBLIC NOTICE

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