





## INDIAN FARMERS FERTILISER COOPERATIVE LIMITED KALOL UNIT

EPC / 02 /3003

Date 23.01.2024

To,

Ministry of Environment, Forest & Climate Change Regional Office Aranya Bhavan, Opp. St. Xaviers School, Near Ch-3 Circle, Sector – 10/A, Gandhinagar, Gujarat - 382010

Kind Attn.: Dr. Yogesh Kumar, Scientist

Sub: Submission of Six-monthly Compliance Report of the Environmental conditions stipulated in Environmental clearance letter for proposed "Expansion/Modernization of the Fertilizer Plant at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanaj, Kasturinagar, Kalol, District- Gandhinagar, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited.

Ref: EC F. No. J-11011/60/2009-IA-II(I) dtd. 1.2.2021, 24.8.2021 & 7.3.2023 Dear Sir,

IFFCO - Kalol unit has obtained Environmental Clearance(EC) from MoEF&CC vide F.No. J-11011/60/2009-IA-II(I) dtd 1.2.2021, 24.8.2021 & 7.3.2023 for (1) the expansion / modernization of the fertiliser plant (2) Expansion of fertiliser plant by installation of new nano urea plant (3) Expansion of Existing Fertilizer Plant for Manufacturing Nano Fertilizer and Nano Micronutrients respectively at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanaj, Kasturinagar, Kalol, District-Gandhinagar, Gujarat.

In this context, as per the conditions laid down in the Environmental Clearance letter, please find attached herewith Six-monthly Compliance report along with all the requisite annexures as per the guidelines of the MoEF&CC

Hope this will fulfil the requirement.

Thanking You,

Yours Faithfully, For, IFFCO-Kalol unit

12/20114412

Director

Encl : As above

CC: 1) Member Secretory, GPCB, Gandhi Nagar

2) Regional Director, Zonal Office (West), CPCB, Vadodara

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## **SIX MONTHLY COMPLIANCE REPORT**

Environmental Clearance Vide F. No. J-11011/60/2009-IA-II(I) dated 07.03.2023, dated 24.08.2021 and dated 01.02.2021

#### **Submitted By:**



## INDIAN FARMERS FERTILISER COOPERATIVE LIMITED

Kalol Unit, Plot no. 712/846, 855, 856 of Saij, 17 - 37 of Dhanej, Kasturinagar, Kalol GIDC, District: Gandhinagar, Gujarat



# <u>Subject: Expansion of Existing Fertilizer Plant for Manufacturing Nano Fertilizer and Nano Micronutrients at IFFCO Kalol Unit.</u>

(Reference: Ministry letter No. F. No. J-11011/60/2009-IA-II(I) dtd. 07.03.2023)

Environmental clearance letter is attached as Annexure - IA.

#### TABLE: 1

Sr. No.	Condition	Compliance Status
	A. Speci	ific Conditions
i)	The PP shall develop Greenbelt over an area of at least, 16165.45 m² by planting 40,000 (1st year) number of trees within a period of one year of grant of EC and 15,000 (2nd year) (2024). The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2m).  The budget earmarked for the plantationshall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geolocation date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.	Agreed  As a part of increasing tree diversity in the IFFCO Kalol complex premises, Action has already been taken to plant 40,000 nos. tree saplings during the year 2023 and 15,000 nos. tree saplings during the year 2024.  Work order No 5605/ 221004240365 dtd 24.8.2023 has been issued to M/s Heartyculture Natural Products LLP, Ranga Reddy Dist, Telangana for plantation and annual maintenance of tree saplings.  Work such as Site cleaning / pruning, uprooting and levelling of identified locations for plantation of tree saplings have been completed within the IFFCO Kalol complex to plant 40000 numbers of tree-saplings using conventional / traditional method.  Appropriate marking and digging of about 18000 Nos pits for plantation of tree saplings have been completed and further marking and digging of pits is in progress.  40,000 nos. native species/local species of tree saplings have been identified and the agency has supplied about 28000 tree saplings so far.  Pits have been prepared for addition of natural growth stimulators like farm yard manure, vermicompost, jeevamrutam, biochar/charcoal, rice husk for better growth of tree sapling after plantation.  Some of the photographs of above mentioned activities are attached herewith as <b>Annexure – I.</b>



Sr.	Condition	Compliance Status
No.	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 Environmental Management and Monitoring functions by engaging Director - environment officials, 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. The 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 the previous year.	Yes, IFFCO Kalol is having separate Environment & Pollution Control Dept. headed by Jt. GM (EPC) with Chemical Engg / Environmental Science qualified staff. Unit has full-fledged laboratory facilities with set up to carry out the environmental management / monitoring functions.  Complex is having full-fledged Fire & Safety Dept with professionally qualified, experienced & skilled staff. Safety Officer as per the qualification given in Factories Act, 1948 is already working in the complex.  Full-fledged Occupational Health center with 3 full time doctors and paramedical staff available round the clock. Details are attached as Annexure - II.
iii)	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 proposed under EMP [Rs. 932.9 lakhs (Capital cost) and Rs. 116 lakhs (Recurring cost)] shall be kept in a 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 the previous year.	IFFCO-Kalol unit complies with all environmental protection measures and safeguards proposed in EIA Report. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project have been implemented.  With reference to the status of proposed EMP, details are as under.  1) For the plantation of 40000 nos. of tree saplings, work order No 5605/ 221004240365 dtd 24.8.2023 has been issued to M/s Heartyculture Natural Products LLP, Ranga Reddy Dist, Telangana.  2) As a part of supply and installation of Effluent Treatment System (ZLD Package) for treatment of 35 m³/day of effluent from Nano expansion project, Purchase order No 5605/ 221004230623 dtd 6.2.2023 has been issued to M/s Tevoren Technologies LLP, Ahmedabad. The photographs of ETS installed at site are attached as Annex – I a.  3) In order to execute EMP such as Installation of 40000 nos. of tree saplings, separate budget has been allocated under Capital budget code 6220101 and same is being utilized for execution of project. Also revenue budget for operation of ETS and AMC for maintenance of trees samplings has been allocated for the year 2023 - 24.



Sr. No.	Condition	Compliance Status
iv)	The total freshwater requirement after expansion will be 10190 KLD (in Phase-I) and 10614 KLD (in Phase-II). Fresh water will be met by Sardar Sarovar Narmada Nigam Ltd. (SSNNL). The PP should ensure that water apply should not be above the permissible.	Total freshwater requirement is as per EC No F.j11011/60/2009-IA-II(I) dtd 7.3.2023 which is well within the prescribed limit of 10190 KLD (in Phase I) at IFFCO Kalol.
	supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawal only after obtaining prior	Average daily freshwater consumption for the period April 2023 to September 2023 is 9923 m³/day
	agreement from the 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.	Also, as per Charter on "Corporate Responsibility for Environment Protection (CREP), limit of specific water consumption fixed for gas-based fertilizer plants is 8 m³/ MT of urea. Specific water consumption for the period from April 2023 – Sept 2023 was 6.27 m³/ MT considering annual Turnaround in April 2023. Same is also within the prescribed limit.
		The unit is having valid agreement with M/s Sardar Sarovar Narmada Nigam Ltd (SSNNL) for supply of Narmada Canal Water and is valid up to 22/02/2026.
V)	No banned chemicals shall be manufactured by the PP. No banned raw materials shall be used in the unit. The PP shall adhere to the notifications/guidelines of the Government in this regard.	Noted & agreed



Sr.	Condition	Compliance Status
No.		
vi)	The PP 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	IFFCO is one of India's biggest cooperative societies which is wholly owned by Indian Cooperatives. IFFCO has been diligent to make its plants energy efficient and continuously works to conserve energy.
	implementation report shall be submitted to the IRO, MoEF&CC in this regard.	Implementation of energy and resource conservation measures is an ongoing process at IFFCO-Kalol. The unit has adapted several measures to conserve energy & natural resources. Implementation of various energy saving schemes have resulted in reduction in Natural
		gas consumption by 47600 SM <sup>3</sup> /day, raw water
		consumption by 600 m <sup>3</sup> /day and CO <sub>2</sub> emission reduction by 97 MT/day. Also Specific energy consumption per MT of urea for the past five years is on a downward trend.
		Process Air Compressor Turbine was replaced with new Siemens Make turbine in April 2021 with higher efficiency at the cost of Rs. 14 crores. This has resulted in MP steam saving of 4.8 MT /hr and Fuel saving of 7250 SM³/day.
		Apart from above, 1970.98 MW of power was generated by Solar energy during the year 2022 - 23 (equivalent to 642 MT of CO <sub>2</sub> emission reduction @ 0.7 kg CO <sub>2</sub> /KWh). 538.994 MW of power was generated by Solar energy during the April 2023 to September 2023.
		Moreover, the newly proposed technology i.e., Nanotechnology is the latest development in R&D of IFFCO that has become proven to manufacture nano fertilizers without emitting pollution into the environment and thereby will reduce carbon footprint. Additionally, CO <sub>2</sub> recovery plant will also be installed in expansion (in case of lean gas) to collect CO <sub>2</sub> from flue gases to increase urea production and reduced CO <sub>2</sub> emission. In this way, IFFCO is already working thoroughly in reducing overall carbon footprint.



Sr. No.	Condition	Compliance Status
vii)	The project proponent shall comply with the environment norms for Fertilizer 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.	IFFCO-Kalol unit complies with all environmental protection measures and safeguards proposed in EIA Report. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project have been implemented.
viii)	All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP 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.	IFFCO Kalol is having full-fledged dedicated Fire & Safety Department with qualified and experienced Fire Staff available round the clock to control/mitigate any emergency.  No major accidents have been registered in the industry during the said period. IFFCO - Kalol unit has achieved the longest accident-free days of 4468 as on 30.09.2023.  Measures adopted to prevent disaster, disaster management planning, risk assessment have been addressed in onsite and offsite Emergency plan of IFFCO - Kalol unit. Relevant page is attached as Annexure - III.  Mutual aid facilities of neighboring industries i.e. ONGC and GAIL, Kadi. Details of Disaster Management & Preventive Measures are mentioned in Annexure - IV.
ix)	The volatile organic compounds (VOCs)/ Fugitive emissions shall be controlled at 99.97 % with effective chillers/modem technology. Regular monitoring of VOCs shall be carried out.	There are no Volatile organic compounds (VOCs) in the manufacturing process in the complex.  For control of fugitive emissions, dust extraction systems with scrubber have been installed in product handling plant. Refer <b>Annexure – V.</b>
x)	The PP shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.	Yes, IFFCO Kalol Unit has implemented major pollution abatement measures for recycling and reusing of treated water and optimum utilization of Raw/ Fresh water. Details are mentioned in <b>Annexure – VI.</b>



Sr.	Condition	Compliance Status
No.		
xi)	As committed by the PP, Zero Liquid Discharge shall be ensured. The domestic wastewater shall be partially treated in the existing ETP and flushing wastewater shall be discharged to soak pits. ETP plant shall be installed total capacity of 35 KLD. Out of 35 KLD, MEE, Stripper and AFFD will have capacity of 25 KLD. Treated water shall be reused for horticulture/ gardening/ green belt development purposes.	There is no discharge of treated water outside the plant premises. The domestic wastewater is partially treated in the existing ETP, and flushing wastewater is discharged to soak pits. ETP plant of 35 KLD capacity has already been installed at the Nano Fertiliser unit.  The photographs of ETS installed at Nano Fertiliser unit is attached as <b>Annexure – I a.</b>
xii)	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration and the data to be transmitted to the CPCB and SPCB servers. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	In compliance to CPCB direction regarding OCEMS, IFFCO Kalol installed PM Analyzer (Make: Durag) at ID Fan stack of Urea prill tower on 1.9.2016 on trial basis. It was observed that trials runs were not successful and same was communicated to the supplier M/s Adage Automation. In response to it, a representative from Adage Automation visited site and removed the same from prill tower ID Fan on 15.2.2018. This was communicated to CPCB vide our E-Mail under the subject. "OCEMS Compliance reporting protocol" Copy of the E-Mail msg and letter sent to CPCB is attached herewith as <b>Annexure - VII.</b>
		A continuous online monitoring system have been installed for measurement of pH, Ammonical nitrogen and flow and Data logger have been connected with CPCB & GPCB servers. Photographs of the same are attached as <b>Annexure - VIII.</b>
		Blind has been installed at the downstream valve, over final discharge line of treated water from ETP going outside the plant premises. Flow meters have already been provided on the treated effluent final discharge pipeline of ETP.
xiii)	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 toxic/hazardous raw materials are stored/maintained with bare minimum with respect to quantity and inventory.
	the Regional Office of Ministry and SPCB along with the compliance report.	Details of stock of toxic/hazardous raw materials with quantity attached as <b>Annexure – IX.</b>



Sr. No.	Condition	Compliance Status
xiv)	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.	IFFCO Kalol has full-fledged Occupational Health center with 3 full time doctors and paramedical staff available round the clock. Details of the medical facilities at Occupational Health center is attached as <b>Annexure - X.</b>
		Pre-employment and periodical medical examinations of the employees are carried out. Health data is used as reference for deploying the duties of the workers. Medical checkup report (as per Form 32) of Employee & Contract Workmen are attached as <b>Annex – X A &amp; B</b> .
		All required PPE's have been provided to all employees while doing the job. List of PPE's available at various areas in the Plant is attached as <b>Annexure – XI.</b>
xv)	Proper Ventilation with adequate air change cycle shall be made for healthy working	There are no Volatile organic compounds (VOCs) in the manufacturing process in the complex.
	environment for the workers. Work Zone monitoring should be done for VOC.	For control of fugitive emissions, dust extraction systems with scrubber have been installed in product handling plants. Refer <b>Annexure – V.</b>
xvi)	Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training	Yes, periodically training on various safety & health aspects of chemicals handling is being imparted to all employees.
	shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.	Details with photographs of training provided to employees is attached as <b>Annexure – XII.</b>
xvii)	The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.	IFFCO Kalol has an efficient and effective fire prevention and firefighting system to mitigate any emergency during manufacturing process of Urea & Nano fertilizers and in material handling. Details of the Fire & Safety system available at IFFCO Kalol is attached as <b>Annexure – XIII.</b>
xix)	The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.	Rainwater harvesting system has already been installed at township and outside the plant premises near Union Office, details of which is attached as <b>Annexure – XIV</b> .  Process effluent / any wastewater is not allowed to mix with storm water.



Sr. No.	Condition	Compliance Status
xx)	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.	<ul> <li>Specific vessels / tanks have Process &amp; Instrument control valves for controlled use of active ingredients/ chemicals and to minimize the waste.</li> <li>Urea dust collected from cyclone separators of prill cooling system is dissolved in a tank and is reused in the Urea manufacturing process.</li> <li>IFFCO Kalol unit is having automatic weighing &amp; filling system in product handling plant to minimize spillage.</li> <li>IFFCO Kalol Unit is having close feed system for production of Nano fertilisers and Diesel Exhaust Fluid (DEF) in urea plant.</li> <li>Vent scrubber (V-1207) has been installed to scrub off, off-gases from Ammonia scrubber (V-1203) to recover ammonia, so as to minimize ammonia release to the atmosphere. Gases from the Vent scrubber contain less than 100 mg/Nm³ ammonia as against the permissible limit of 175 mg/Nm³ specified in the consent Order.</li> <li>Good quality and high-pressure hoses are in use for cleaning purposes and to reduce waste water generation.</li> </ul>
xxi)	The Plastic Waste Management (Amendment) Rules, 2022 shall be duly complied w.r.t Extended Producer Responsibility (EPR) target as a brand owner.  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.	Registration certificates of IFFCO as a brand owner for Ammonia-Urea complex and as a Producer for Nano Fertiliser Unit are attached as <b>Annexure - XV A &amp; B</b> .  As committed in EIA Report, CER fund has been allocated for implementation of various CER activities in upcoming 4 years.  Allocated fund for the first year 2021-22 was Rs.24 lakhs and the amount of Rs. 24 lakhs were spent during the year, allocated fund for the second year 2022-23 was Rs.20 lakhs, But Rs. 27 lakhs were spent during the second year (2022-23). Allocated fund for the third year 2023 - 24 is Rs.10 lakhs, But Rs. 21.54 lakhs were spent during April 2023 – September 2023 due to additional requirement. (Ref. Table No 1.1 of Annex XVIII).



Sr. No.	Condition	Compliance Status
1101	General Conditions	
i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment Forest and Climate Change/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, no further expansion / modification shall be carried out without prior approval from MOEF & CC, as applicable.
ii)	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.	All relevant clause of under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 are complied and the Complex is having full-fledged Fire & Safety Dept with professionally qualified, experienced & skilled staff.  IFFCO Kalol has an efficient and effective fire prevention and firefighting system to mitigate any emergency during manufacturing process Ammonia, Urea & Nano fertilisers. Details of the Fire & Safety system available at IFFCO Kalol is attached as <b>Annexure – XIII.</b>
		Measures adopted to prevent disaster, disaster management planning, risk assessment have been addressed in onsite and offsite Emergency plan of IFFCO - Kalol unit. Relevant page is attached as <b>Annexure - III.</b> Mutual aid facilities of neighboring industries i.e. ONGC and GAIL, Kadi have been made.
		Details of Disaster Management & Preventive Measures are mentioned in <b>Annexure - IV</b> .
iii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	All light fittings used for lighting purpose are LED type in Plant area, office buildings and residential township. Details of measures implemented for Energy Conservation during last 03 Years is attached as Annexure - XVI.
		Apart from above, 1970.98 MW of power was generated by Solar energy during the year 2022 - 23 (equivalent to 642 MT of CO <sub>2</sub> emission reduction @ 0.7 kg CO <sub>2</sub> /KWh). 538.994 MW of power was generated by Solar energy during the April 2023 to September 2023.



Sr.	Condition	Compliance Status
No.	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 (daytime) and 70 dBA (night time).	Yes, the overall noise levels in and around the plant area is well within the standards. Details of noise control measures installed at source of noise generation and Latest noise level monitoring report issued by M/s AWH Laboratory, Ahmedabad (NABL accredited Lab) is attached as <b>Annexure – XVII.</b>
V)	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.	As committed in EIA Report, CER fund has been allocated for implementation of various CER activities in upcoming 4 years.  Allocated fund for the first year 2021-22 was Rs.24 lakhs and the amount of Rs. 24 lakhs were spent during the year, allocated fund for the second year 2022-23 was Rs.20 lakhs, But Rs. 27 lakhs were spent during the second year (2022-23). Allocated fund for the third year 2023 - 24 was Rs.10 lakhs, But Rs. 21.54 lakhs were spent during April 2023 – September 2023 due to additional requirement. (Ref. Table No 1.1 of Annex XVIII).
vi)	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.	Every year IFFCO Kalol earmark sufficient funds towards capital cost and recurring cost per annum to implement environment management/ operate existing pollution control measures. These funds are not diverted for any other purpose.
vii)	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.	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 Sarpanch of nearby villages. Copies of receipt of Acknowledgement are attached as <b>Annex-XIX</b> .



Sr. No.	Condition	Compliance Status
viii)	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.	Noted, IFFCO Kalol Unit started submission of sixmonthly compliance report of EC conditions to Regional Office of MOEF & CC, Zonal office of CPCB & GPCB from June 2021 onwards.  Copy of Environmental Clearance and sixmonthly compliance status report have been posted on the website of IFFCO.
ix)	The environmental statement for each financial year ending 31 <sup>st</sup> 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.	Yes, every year the environmental statement for each financial year ending 31st March in Form - V is submitted to GPCB. Copy of Environmental statement (Form V) for Year 2022 - 23 submitted to GPCB is attached as Annexure - XX. Same will be put on the IFFCO website along with the status of compliance of environmental clearance conditions. Soft copy of same is being sent to Regional Office of MoEF&CC, Gandhinagar by email.
x)	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.	IFFCO had advertised information related to Environment clearance on dtd 15 <sup>th</sup> March 2023, in two local newspapers one in Gujarati and another in English.  Copies of advertisement published in Newspapers, such as Divya Bhaskar dtd. 15/3/2023 and Times of India dtd. 15/3/2023 are attached as <b>Annexure – XXI</b> .
xi)	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.	CTE No. 61798 dtd 13/03/2023 obtained from GPCB for Expansion of Existing Fertilizer Plant for Manufacturing Nano Fertilizer and Nano Micronutrients. CTO / Amendment to CCA No GPCB/CCA-GNR-95(12)/ID-16444/757582 dtd 1.11.2023 with validity upto 10.3.2028,obtained from GPCB
xii)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted



# Subject: Expansion of Fertiliser Plant by installation of New Nano Urea Plant at IFFCO Kalol Unit.

#### (Reference: Ministry letter No. F. No. J-11011/60/2009-IA-II(I) dtd. 24th August, 2021)

Environmental clearance letter is attached as Annexure IB.

TABLE: 2

SNo	Conditions	Compliance Status
	Specific Conditions	
i)	All the specific and general conditions stipulated in the environmental clearance dated 1st February, 2021 shall be complied in letter and spirit.	All the specific and general conditions stipulated in the environmental clearance dated 1 <sup>st</sup> February 2021 have been complied and updated the compliance status report.
	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 IRO, MoEFCC in this regard.	IFFCO is one of India's biggest cooperative societies which is wholly owned by Indian Cooperatives. IFFCO has been diligent to make its plants energy efficient and continuously works to conserve energy. Implementation of energy and resource conservation measures is an ongoing process at IFFCO-Kalol. The unit has adapted several measures to conserve energy & natural resources. Implementation of various energy saving schemes have resulted in reduction in Natural gas consumption by 47600 SM³/day, raw water consumption by 600 m³/day and CO₂ emission reduction by 97 MT/day. Also, Specific energy consumption per MT of urea for the past five years is on a downward trend.
		Process Air Compressor Turbine was replaced with new Siemens Make turbine in April 2021 with higher efficiency at the cost of Rs. 14 crores. This has resulted in MP steam saving of 4.8 MT /hr and Fuel saving of 7250 SM³/day.
		Apart from above, 1970.98 MW of power was generated by Solar energy during the year 2022 - 23 (equivalent to 642 MT of CO <sub>2</sub> emission reduction @ 0.7 kg CO <sub>2</sub> /KWh). 538.994 MW of power was generated by Solar energy during the April 2023 to September 2023.
		Moreover, 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. Additionally, CO <sub>2</sub> recovery plant will also be installed in expansion (in case of lean gas) to tap CO <sub>2</sub> from flue gases to increase urea production and reduce CO <sub>2</sub> emission. In this way, IFFCO is already working for reducing overall carbon footprint.



Sr. No.	Conditions	Compliance Status
iii)	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 addendum to the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	IFFCO-Kalol unit complies with all environmental protection measures and safeguards proposed in EIA Report. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project have been implemented.
iv)	Total fresh water requirement shall not exceed 10069 KLD (in Phase I) and 10493 KLD (in Phase II). Prior permission in this regard shall be obtained from the concerned regulatory authority.	Total freshwater requirement is as per EC No F. 11011/60/2009-IA-II(I) dtd 24.8.2021 which is well within the prescribed limit of 10190 KLD (in Phase I) at IFFCO Kalol.  Average daily freshwater consumption for the period April 2023 to September 2023 is 9923 m³/day  Also, as per Charter on "Corporate Responsibility for Environment Protection (CREP), limit of specific water consumption fixed for gas-based fertilizer plants is 8 m³/ MT of urea. Specific water consumption for the period from April 2023 – Sept 2023 was 6.27 m³/ MT considering annual Turnaround in April 2023. Same is also within the prescribed limit  The unit is having valid agreement with M/s Sardar Sarovar Narmada Nigam Ltd (SSNNL) for supply of Narmada Canal Water and is valid up to 22/02/2026.
v)	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.	
vi)	As proposed, at least Rs. 36.5 lakhs shall be earmarked for conservation plan and shall be implemented in coordination with State Forest & Wildlife Department / Local Village Administration.	Rs. 36.5 lakhs have been earmarked for wildlife conservation plan After review by the Range Forest Officer, Kadi Wildlife Range, Revised wildlife conservation plan incorporating GPS location has already been submitted for approval of the plan.



## (Reference: Ministry letter No. F. No. J-11011/60/2009-IA-II(I) dated 1st February, 2021)

Environmental clearance letter is attached as **Annexure I C.** 

#### TABLE: 3

Sr. No.	Conditions	Compliance Status				
	Specific Conditions					
i)	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	IFFCO-Kalol unit complies with all environmental protection measures and safeguards proposed in EIA Report. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project have been implemented.				
ii)	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development.	There is no discharge of treated water outside the plant premises.				
iii)	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	In compliance to CBCB direction regarding OCEMS, IFFCO Kalol installed PM Analyzer (Make: Durag) at ID Fan stack of Urea prill tower on 1.9.2016 on trial basis. It was observed that trial runs were not successful and same was communicated to the supplier M/s Adage Automation. In response to it, a representative from Adage Automation visited site and removed the same from prill tower ID Fan on 15.2.2018. This was communicated to CPCB vide our E-Mail under the subject. "OCEMS Compliance reporting protocol" Copy of the E-Mail msg and letter sent to CPCB is attached as Annexure - VII.				
		Continuous online monitoring system have been installed for measurement of pH, Ammonical nitrogen & flow and Data logger have been connected with CPCB & GPCB servers. Photographs of the same are attached as <b>Annexure - VIII.</b>				
		Blind has been installed at the downstream valve, over final discharge line of treated water from ETP going outside the plant premises. Flow meters have already been provided on treated effluent final discharge pipeline of ETP.				
		15				



Sr. No.	Conditions	Compliance Status
iv)	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.	The toxic/hazardous raw materials are stored/ maintained with bare minimum with respect to quantity and inventory.  Details of stock of toxic/hazardous raw materials with quantity attached as <b>Annexure – IX</b> .
v)	Occupational health center for surveillance of the worker's health shall be set up. The health data shall be used in deploying the	IFFCO Kalol has full-fledged Occupational Health center with 3 full time doctors and paramedical staff available round the clock.
	duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	Details of the medical facilities at Occupational Health center is attached as <b>Annexure - X.</b>
	carety filtermaek for percental procession.	Pre-employment and periodical medical examinations of the employees are carried out. Health data is used as reference for deploying the duties of the workers. Medical checkup report (as per Form 32) of Employee & Contract Workmen are attached as Annexure – X A & B.
		All required PPE's have been provided to all employees while doing the job. List of PPE's available at various areas in the Plant is attached as <b>Annexure – XI.</b>
vi)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.	Training on various safety and health aspects of chemicals handling has been regularly imparted to employees and contract workmen. Practical training on firefighting and emergency handling is also conducted periodically.
		Refresher Fire & Safety training is being imparted to all employees and contract workmen every year. photographs of Safety and visual reality training provided to employees is attached herewith as <b>Annexure – XII.</b>
vii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	IFFCO Kalol is having full-fledged Fire & Safety Dept. with professionally qualified, experienced & skilled staff.
	Fire-fighting system shall be as per the norms.	IFFCO Kalol has efficient and effective fire prevention and firefighting system to mitigate any emergency during manufacturing processes of Urea & Nano fertilizers. Details of the Fire & Safety system available at IFFCO Kalol is attached as <b>Annexure – XIII.</b>



Sr. No.	Conditions	Compliance Status
viii)	Safety and risk assessment studies shall be conducted and action plan and mitigation measures shall be properly implemented.	Safety and risk assessment studies of IFFCO Kalol have been conducted during Dec 2018 to Jan 2019 by M/s iFluid Engineering, Chennai. Observation and recommendation/mitigation measures have been implemented.
		Safety audit is being carried out as per the Statutory requirements. Last safety audit was conducted by Safety Consultancy Services, Ahmedabad during 6 <sup>th</sup> to 8 <sup>th</sup> November 2023.
ix)	Solvent management shall be carried out as follows:	Not Applicable, as there is no usage of solvent in the manufacturing process in the complex.
	<ul> <li>(a) Reactor shall be connected to chilled brine condenser system.</li> <li>(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.</li> <li>(c) Solvents shall be stored in a separate space specified with all safety measures.</li> <li>(d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</li> <li>(e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.</li> <li>(f) All the solvent storage tanks shall be</li> </ul>	
x)	Volatile organic compounds (VOCs)/Fugitive emissions shall be	There are no Volatile organic compounds (VOCs) in the manufacturing process in the complex.
	controlled at 99.99% with effective chillers/modern technology.	For control of fugitive emissions, dust extraction systems with scrubber have been installed in product handling plant. Refer <b>Annexure – V.</b>
xi)	Total fresh water requirement shall not exceed 10371 cum/day proposed to be met from existing water supply from Narmada canal to the IFFCO Kalol unit. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.	Average daily freshwater consumption for the period April 2023 to September 2023 was 9923 m3/day which is within the prescribed limit.  The unit is having valid agreement with M/s Sardar Sarovar Narmada Nigam Ltd (SSNNL) for supply of Narmada Canal Water and is valid up to 22/02/2026. Copy of agreement is attached herewith as Annexure - XXII.



Sr. No.	Conditions	Compliance Status
xii)	Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.	Rainwater harvesting system has already been installed at township and outside the plant premises near Union Office, details of which is attached as <b>Annexure – XIV</b> .  Process effluent / any wastewater is not allowed to mix with storm water.
xiii)	The company shall undertake waste mini	mization measures as below
	(a) metering and control of quantities of active ingredients to minimize waste;	Specific vessels / tanks are having Process & Instrument control valves for controlled use of active ingredients/ chemicals and to minimize the waste.
	(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Urea dust collected from cyclone separators of prill cooling system is dissolved and reused in the Urea manufacturing process.
	(c) Use of automated filling to minimize spillage.	IFFCO Kalol unit is having automatic weighing & filling system in product handling plant to minimize spillage.
	(d) Use of Close Feed system into batch reactors.	IFFCO Kalol Unit is having close feed system for production of Nano fertilizers and Diesel Exhaust Fluid (DEF) in urea plant.
	(e) Venting equipment through vapor recovery system.	Vent scrubber (V-1207) has been installed to scrub off off off-gases from Ammonia scrubber (V-1203) to recover ammonia, so as to minimize ammonia release to the atmosphere. Gases from the Vent scrubber contain less than 100 mg/Nm³ ammonia as against the permissible limit of 175 mg/Nm³ specified in the consent Order.
	(f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.	Good quality and high-pressure hoses are in use for cleaning purpose and to reduce wastewater generation.



Sr. No.	Conditions	Compliance Status
No. xiv)	The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.  Records of tree canopy shall be monitored through remote sensing map.	Existing Green area at IFFCO Kalol complex is 46.6257 Ha which is 48.81 % of total area of 95.5 Ha covered under green belt. Photographs showing green area in the complex are attached as <b>Annexure - XXIII.</b> Plantation activity in and around the plant is ongoing activity. During the Year 2022-2023, 4000 samplings were planted in Plant premises and Township.  Work order No 5605/ 221004240365 dtd 24.8.2023 has been issued to M/s Heartyculture Natural Products LLP, Ranga Reddy Dist, Telangana for plantation and annual maintenance of tree saplings.  Work such as Site cleaning / pruning, uprooting and levelling of identified locations for plantation of tree saplings have been completed within the IFFCO Kalol complex to plant 40000 numbers of tree-saplings using conventional / traditional method.  Appropriate marking and digging of about 18000 Nos pits for plantation of tree saplings have been completed and further marking and digging of pits is in progress.  40,000 nos. native species/local species of tree saplings have been identified and the agency has supplied about 28000 tree saplings so far.  Pits have been prepared for addition of natural growth stimulators like farm yard manure, vermicompost, jeevamrutam, biochar/charcoal, rice husk for better
		growth of tree sapling after plantation.  Some of the photographs of above mentioned activities are attached herewith as <b>Annexure – I.</b>
xv)	The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.	As committed in EIA Report, CSR fund has been allocated for implementation of various CSR activities in upcoming 4 years. Details of amount spent for last two years is mentioned in <b>Table No 1.1 of Annex XVIII</b> (Ref; point no. xxii on page 9 of 23 of this compliance report).  Allocated budget for EMP regarding implementation of Water pollution control scheme and Green belt development have been utilized (Ref; point no. xiv on page 19 of 23 of this compliance report).



Sr.	Conditions Compliance Status			
No.	Colluitions	Compliance Status		
xvi)	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Yes, IFFCO Kalol is having separate Environment & Pollution Control Dept. headed by Jt. GM (EPC) with Chemical Engg / Environmental Science qualified staff. Unit is having full-fledged laboratory facilities with set up to carry out the environmental management / monitoring functions. Details are attached as Annexure - II.		
	Genera	al Conditions		
(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment Forest and Climate Change/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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted, no further expansion / modification shall be carried out without prior approval from MOEF & CC, as applicable.		
(ii)	The energy source for lighting purpose shall be preferably LED based or advance having preference in energy conservation and environment betterment.	All light fittings used for lighting purpose are LED type in Plant area, office buildings and residential township.  So far, solar panels of 1470 KWP capacity have been installed over various buildings in plants and township. 1970.98 MW of power was generated by Solar energy during the year 2022 - 23 (equivalent to 642 MT of CO2 emission reduction @ 0.7 kg CO2/KWh). 538.994 MW of power was generated by Solar energy during the April 2023 to September 2023.		
(iii)	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	set up in the complex considering upwind, downwind direction and maximum ground level concentrations. Ambient air quality monitoring data is submitted on a monthly basis to GPCB, Gandhinagar. All parameters are within limit.		



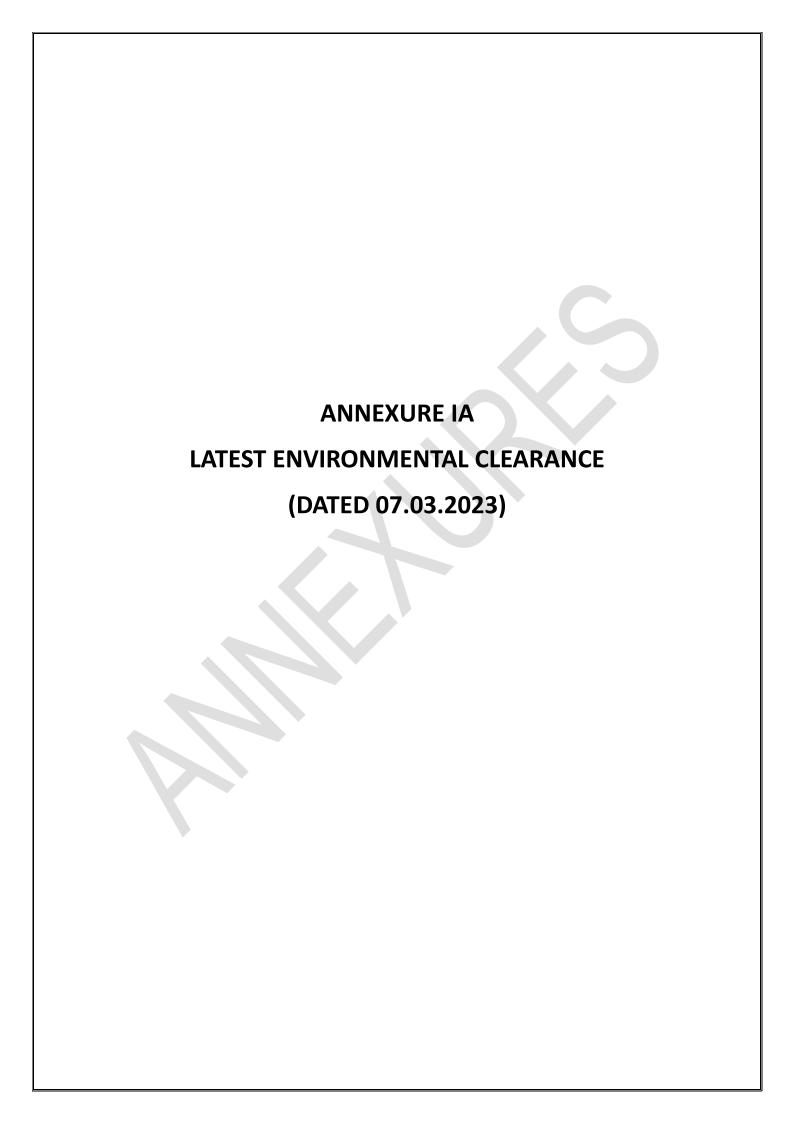
Sr. No.	Conditions	Compliance Status			
(iv)	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.				
(v)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act 1986 Rules 1989 viz. 75 dBA (day time) and 70 dBA (night time).	well within the standards. Details of noise continuous measures installed at source of noise generation at Latest noise level monitoring report is attached Annexure – XVII.			
(vi)	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.	Rainwater from Roof tops of Nano fertilizer unit is recharged to ground water through six numbers of recharging wells.  Rainwater harvesting system has already been installed at township and outside the plant premises near Union Office (Ref: <b>Annexure - XIV</b> ) to collect the rainwater/storm water and to recharge the ground water.			
(vii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre- employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Yes, periodically training on various safety & health aspects of chemicals handling is being imparted to all employees.  Details with photographs of training provided to employees is attached as <b>Annexure – XII.</b> Pre-employment and routine periodical medical examinations (Physical examination, Urine Routine examination, Hematology, LFT, Blood Sugar, chest x rays, Audiometry, Spirometry, Vision testing, ECG etc.) of employee and contract workmen is undertaken on regular basis to analyze the health status. Records of the same have been maintained.  Sample copies of medical check-up reports of employee & Contract Workmen are attached as <b>Annexure - X A&amp;B.</b>			



Sr.	Conditions	Compliance Status		
No. (viii)	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.	Accepted. As committed in EIA Report, CSR fund has been allocated for implementation of various CSR activities in upcoming 4 years. Allocated fund for the first year 2021-22 was Rs.24 lakhs and the amount of Rs. 24 lakhs were spent during the year, allocated fund for the second year 2022-23 is Rs.20 lakhs, But Rs. 27 lakhs were spent during the second year (2022-23). Allocated fund for the third year 2023 - 24 is Rs.10 lakhs, But Rs. 21.54 lakhs were spent during April 2023 – September 2023 due to additional requirement. (Ref. Table No 1.1 of Annex XVIII).		
(ix)	The company shall undertake eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment.	IFFCO Kalol unit is contributing towards various social welfare measures in nearby villages and localities under IRDP schemes. Those measures include road construction, sanitation facilities, medical camps, drinking water supply. Details are attached as <b>Annex - XVIII.</b>		
(x)	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.	Every year IFFCO Kalol earmark sufficient funds towards capital cost and recurring cost per annum to implement environment management/ operate existing pollution control measures. The funds so earmarked for environment management/ operate existing pollution control measures are not diverted for any other purpose.		
(xi)	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.	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 Sarpanch of nearby villages. Copies of receipt of Acknowledgement are attached as <b>Annexure - XXIV.</b>		
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by email) to the respective 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.	Noted and IFFCO Kalol Unit have started submission of six-monthly compliance report of EC conditions to Regional Office of MOEF & CC, Zonal office of CPCB & GPCB from June 2021 onwards.  Copy of Environmental Clearance and six-monthly compliance status report has been posted on the website of IFFCO.		



Sr. No.	Conditions	Compliance Status		
(xiii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by email.	financial year ending 31st March in Form-V is submitted to GPCB.  Copy of Environmental statement (Form V) for Yea 2022 - 23 submitted to GPCB is attached as <b>Annexure - XX</b> .  Same will be put on the IFFCO website along with the		
(xiv)	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.	IFFCO had advertised information related to Environment clearance on dtd 7 <sup>th</sup> February 2021, in two local newspapers one in Gujarati and another in English.  Copies of advertisement published in Newspapers, such as Divya Bhaskar dtd. 7/2/2021 and Times of India dtd. 7/2/2021 are attached as <b>Annexure – XXV</b> .		
(xv)	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.	CTE No. 61798 dtd 13/03/2023 obtained from GPCB for Expansion of Existing Fertilizer Plant for Manufacturing Nano Fertilizer and Nano Micronutrients.  CTO / Amendment to CCA No GPCB/CCA-GNR-95(12)/ID-16444/757582 dtd 1.11.2023 with validity upto 10.3.2028,obtained from GPCB		
(xvi)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted		



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#### Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

To.

The Director INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO) IFFCO Kalol Unit, P.O. Kasturi Nagar, District Gandhinagar, North Gujarat - 382423, Gandhinagar, Gujarat-382423

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/GJ/IND3/412440/2022 dated 21 Feb 2023. The particulars of the environmental clearance granted to the project are as below.

EC23A016GJ154380 1. EC Identification No. 2. File No. J-11011/60/2009-IA-II(I) 3. **Project Type** Expansion 4. Category 5. Project/Activity including 5(a) Chemical fertilizers

Schedule No. 6. Name of Project Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and

Manutactuming
Nano Micronutrients at Ploutio.
855, 856 of Saij,17-37 of Dhanej,
Carturinagar, Kalol GIDC, District Nano Micronutrients at Plot no. 712/846, Kasturinagar, Kalol GIDC, District -Gandhinagar, Gujarat- 382423

7. Name of Company/Organization INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)

8. **Location of Project** Gujarat N/A 9. **TOR Date** 

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed) Mr. Motipalli Rámesh Date: 07/03/2023 Scientist E IA - (Industrial Projects - 3 sector)



Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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# F. No. J-11011/60/2009-IA-II (I) Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

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Indira Paryavaran Bhawan, Jorbagh Road, New Delhi - 110003

Dated: 7<sup>th</sup> March, 2023

To

M/s. Indian Farmers Fertilizer Cooperative Limited (IFFCO)

IFFCO Kalol Unit, P.O. Kasturi Nagar,

District Gandhinagar, North Gujarat – 382423

Email: iffcofertilizer2020@gmail.com

Subject: Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and Nano Micronutrients of production capacity (Ammonia- 4,01,500 MTPA, Urea (100%)-6,75,000, Diesel Exhaust Fluid (DEF) (32.5% Urea Solution) upto 4,01,538 (Equivalent to 1,30,500 MTPA Urea), Nano Fertilizers @ Nano Urea/Nano Micronutrients (Nano Zinc/ Nano Copper/ Nano Boron/ Nano Sulphur)/Nano DAP (Nano I + Nano II)-100375 KLPA) located at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanej, Kasturinagar, Kalol GIDC, District Gandhinagar, Gujarat by Indian Farmers Fertilizer Cooperative Limited (IFFCO) - Environmental Clearance

Sir,

This has reference to your proposal No. IA/GJ/IND3/412440/2022, on the above subject matter.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Environmental Clearance to the project for Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and Nano Micronutrients of production capacity (Ammonia- 4,01,500 MTPA, Urea (100%)- 6,75,000, Diesel Exhaust Fluid (DEF) (32.5% Urea Solution) upto 4,01,538 (Equivalent to 1,30,500 MTPA Urea), Nano Fertilizers @ Nano Urea/Nano Micronutrients (Nano Zinc/ Nano Copper/ Nano Boron/ Nano Sulphur)/Nano DAP (Nano I + Nano II)- 100375 KLPA) located at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanej, Kasturinagar, Kalol GIDC, District Gandhinagar, Gujarat by Indian Farmers Fertilizer Cooperative Limited (IFFCO).
- 3. The project/activity is covered under Category 'A' of item 5 (a) Chemical Fertilizers of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended). Therefore, the project requires appraisal at Central Level.
- 4. The PP applied for ToR on 07.04.2022 and the Standard ToR was issued on 20.04.2022. The PP applied for Environment Clearance on 11.1.2023 in CAF and submitted EIA/EMP Report and other documents. The PP in the CAF reported that it is an **Expansion EC case.** Due to some shortcomings, the Project was referred back to PP on 19.1.2023 and reply to the same was submitted on 23.1.2023. The proposal was placed in 46<sup>th</sup> EAC Meeting held on 30<sup>th</sup>- 31<sup>st</sup> January & 1<sup>st</sup> February 2023, wherein the PP and an accredited Consultant, M/s EQMS India Pvt. Ltd [Accreditation number NABET/EIA/1922/RA 0197, valid upto 3.5.2023], made a detailed presentation on the salient features of the project and informed the following:
- 5. The PP reported that the existing land area is 95.5158 Ha. No additional land will be required for proposed expansion and no R& R is involved in the Project. The details of products are as follows:

Product	Unit	As per Latest	Additional/	After	Remarks
		EC granted	Proposed	Expansion	
Ammonia	MTPA	4,01,500	0	4,01,500	
Urea (100%)	MTPA	6,75,000 max	0	6,75,000 max	
(Fertiliser		or		or	No changes
Grade/Tech					
Grade)					
Urea (100%) or &	MTPA	5,44,500	0	5,44,500	
Diesel Exhaust		&		&	
Fluid (32.5% of		4,01,538		4,01,538	
Urea Solution)		i.e.,		i.e.,	
		(Equivalent to		(Equivalent to	
		1,30,500 of	A COL	1,30,500 of	
		100% Urea)	27 T = 2	100% Urea)	
		max or #	July 1	max or #	
Urea (100%) or &	MTPA	5,44,500	0	5,44,500	
Diesel Exhaust	A.9	&&		&	
Fluid (40% of	447	3,26,250		3,26,250	
Urea Solution)	11	i.e.,		i.e.,	
	11	(Equivalent to	_ ~	(Equivalent to	
	/ /	1,30,500 of		1,30,500 of	
	/ 12	100% Urea)		100% Urea)	
		max #		max #	
Nano Fertilizers	, ,	// AN		. Tro.	Addition of
@		P PAN			Nano DAP and
Nano Urea/Nano		Contract of the Contract of th	W . Z. 0 /	E/1946	Nano
Micronutrients	KLPA	63875	36500	100375**	Micronutrients
(Nano Zinc/ Nano	1 104	T. 20. 3.3		' <i>         </i>	(Nano Boron &
Copper/ Nano	\ <b>\</b>	11 = 1.			Nano Sulphur)
Boron/ Nano	\ <b>T</b>	Charles of the last		- 1/ / .	<u></u>
Sulphur) /Nano	$a \setminus b$				
DAP** (Nano I +	$\sim$			1.0	2"
Nano II)	100			F 1 34	

Note - # Depending upon the requirement of urea fertilizer in the market, there shall be variation in quantity of DEF (32.5% and/or 40% urea Solution) production. The total urea production shall, however, be limited to 6,75,000 MTPA (Maximum) under all the above combinations.

- \*\* Products shall be manufactured in any combination or single product in both plants i.e., Nano I & Nano II on demand basis. However, total capacity of plant will be limited to 100375 KLPA.
- @ Nano Urea contains 40000 ppm (Min) of nitrogen, Nano Zinc contains 10000 ppm (Min) of Zinc and Nano copper contains 8000 ppm (Min) of copper.
- @ Nano Boron contains 4500 ppm (Min) of Boron, Nano Sulphur contains 10000 ppm (Min) of Sulphur and Nano DAP contains 8 % of Nitrogen (Min) and 16 % of P2O5(Min).
- 6. The PP reported that there is no violation case as per the Notification No. S.O.804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.
- 7. The PP reported that Ministry had issued EC earlier vide letter no. **J-11011/60/2009-IA-II(I) dated 24.08.2021** for the existing project, Expansion/Modernization of the Fertilizer Plant. Certified compliance was given by IRO, MoEF&CC Gandhinagar on 18.07.2022. As per the report, out of total

- 38 conditions, 26 are complied, 4 are partly complied and 6 are agreed to comply by the project proponent, 1 condition is noted by the unit whereas 1 condition is not applicable to the unit. Response of partly complied conditions (copy of wildlife conservation plan, details of third party carrying out monthly monitoring of AAQ and noise, details of expenditure incurred for environment management/pollution control measures) was submitted by IFFCO to IRO, MoEF&CC on 01.11.2022.
- 8. The PP reported that There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Two river/Canal/water bodies are present in 10 Km radius of project site i.e., Narmada Canal (2.8 Km, S) and Sabarmati River (12.8 Km, ESE). The PP reported that no forest area is involved in the proposed project and two Schedule-I species i.e Pavo cristatus (Indian Peafowl), **Indian Monitor/Lizard** exist within 10 km study area of the project for which conservation plan has been submitted to Chief wildlife warden dated 9.8.2021
- 9. The PP reported that Ambient air quality monitoring was carried out at 8 locations during  $1^{st}$  October 2021 to  $31^{st}$  December 2021 and the baseline data indicates the range of concentrations as  $PM_{10}$  (43 90  $\mu g/m^3$ ),  $PM_{2.5}$  (19 49  $\mu g/m^3$ ),  $SO_2$  (5.14 16.20  $\mu g/m^3$ ) and  $NO_2$  (13.40 29.20  $\mu g/m^3$ ),  $NH_3$  (18.50 48.40  $\mu g/m^3$ ) and CO (0.58 1.32  $m g/m^3$ ). All parameters are within the National Ambient Air Quality Standards (NAAQS). Ambient Noise quality monitoring was carried out at 8 locations during the  $1^{st}$  October 2021 to  $31^{st}$  December 2021 and baseline data indicates the range of concentrations as Day Noise (49.9-62.4 dB(A)) and Night Noise (37.1-52.1 dB(A)). The noise level is within the prescribed limit in all the monitoring stations except at N3 (Kalol (Nr. Institute of Pharmacy)) and N8 (Nirma University Tragad). The noise level exceeded at these locations due to nearby residential areas leading to community noise as well vehicular traffic in the area contributes to noise levels in the area.
- 10. Ground water quality monitoring was carried out at 8 locations during the 1st October 2021 to 31st December 2021 and baseline data indicates pH ranged between to 6.79 to 7.69 which are well within the specified standard of 6.5 to 8.5 limit. Total hardness levels were recorded in the range between 328 to 684 mg/l which is within the permissible limit 600 mg/l at all locations except at GW6 i.e., Ramnagar. The Total Dissolved Solids (TDS) concentration recorded ranged between 765 to 2160 mg/l and was within the permissible limits (2000 mg/l) at all locations except at GW1 (nearby project site). Chlorides at all the locations were within the permissible limits (1000 mg/l) as it ranged between 215 716 mg/l. Sulphates at all the locations were within the permissible limits (400 mg/l) as it ranged between 65 –226 mg/l. Bacteriological studies reveal that no coliform bacterial are present in the samples. The heavy metal contents were observed to be in below detectable limits. All physical and general parameters were observed within the permissible limit as per IS10500:2012 (Second Revision). Thus, it is recommended that water be filtered and disinfected prior to be given for drinking water requirements.
- 11. Surface water quality monitoring was carried out at 3 locations during the 1<sup>st</sup> October 2021 to 31<sup>st</sup> December 2021 and baseline data indicates pH values of all analysed samples ranged between 7.52 to 7.63. TDS levels were observed to be in range from 204 to 1220 mg/l. Total hardness levels were observed to be in the range of 142 to 286 mg/l. Dissolved Oxygen values ranged between 6.6 to 7.3 mg/l. The chlorides level was observed to be in range of 36 to 369 mg/l. Sulphate level were found to be ranging from 10 to 118 mg/l. Nitrate levels were found to be observed within the range of 9.4 to 26.5 mg/l. Total Coliform levels were found to be in the range of 120 to 4600 MPN/100 ml. Biochemical Oxygen Demand (BOD) was observed to be in range of 2.1 to 4.3 mg/l. Comparing the values of pH, DO, BOD and Total Coliforms with 'Use based classification of surface waters' published by Central Pollution Control Board; it can be seen that the analysed surface waters is

moderately polluted and classified as "Class 'C' and can be used for as Drinking water source after conventional treatment and disinfection.

- The PP reported that total freshwater requirement after expansion will be 10190 KLD (in 12. Phase-I) and 10614 KLD (in Phase-II). Fresh water will be met by Sardar Sarovar Narmada Nigam Ltd. (SSNNL). The total wastewater generation after expansion in Phase I and Phase II will increase from 1449.5 KLD (Phase I) to 1459 KLD (Phase I) and 1509.5 KLD (Phase II) to 1519 KLD (Phase II) respectively. Wastewater streams are segregated into two categories i.e., Weak effluent containing - Low TDS and Strong effluent containing - High TDS. Normally weak effluent (Containing less TDS) from water treatment plant, HCl storage tanks fumes scrubber is collected in Neutralization tank. The effluents collected from domestic open channel network including cooling water blow down, sand filters back wash, effluents from knockout drums & surface drain are collected in bulk effluent tank by an underground line of 350 mm dia. The strong / off-spec. effluent especially from urea plant (in case of upset condition) and partly from DM plant during regeneration of ion exchange units (after segregation) is collected in strong effluent storage tanks in ETP. Same is pumped to Off-Spec effluent pond having capacity of 40,000 m<sup>3</sup> and is allowed for natural evaporation. Treated water from Bulk Effluent tank is being used for horticulture/ gardening/ green belt development purpose within the plant area. In existing plant, the domestic wastewater is partially treated in the existing ETP and flushing wastewater is discharged to soak pits. For nano fertilizer plant, ETP plant will be set up which will have total capacity of 35 KLD. Out of 35 KLD, MEE, Stripper and AFFD will have capacity of 25 KLD. Treated water will be reused for horticulture/gardening/green belt development purposes.
- 13. The PP reported that the power requirement after expansion will be 282 MWH in Phase-I and 305 MWH in Phase-II which will be sourced from Uttar Gujarat Vij Company Ltd. (UGVCL). Existing unit has DG set of capacity 2200 KVA & 860 KVA as power backup. No additional DG set is proposed. Stack (24 m for 2200 KVA & 22 m for 860 KVA) is provided as per CPCB norms to the existing DG sets.
- 14. Existing unit has 1 nos. of Natural gas-based boilers (80,000 Kg/hr). During normal course of operation of Nano Fertiliser Plant, surplus LP Steam available from Urea-Ammonia Plant will be used. However, during shutdown of Ammonia-Urea plant, there shall be requirement of LP steam for normal operation of Nano Fertilizer Plant. Therefore, a standby boiler of 6TPH natural gas based will be installed to meet steam requirement of Nano-Fertilizer plant. Stack of 35 m has been provided for existing Boilers and 30 m stack is proposed for new 6 TPH Boiler.

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#### 15. Details of Process Emissions Generation and its Management:

S. No.	. No. Stack Attached Fuel Used APCM		APCM	<b>Expected Pollutants</b>				
	Existing Stacks							
1	Steam Boiler -	Natural gas	35 m Stack height	PM, SO <sub>2</sub> & NO <sub>x</sub>				
	80000 kg/hr							
2	DG Set -2200 KW	HSD	24 m for 2200 KW	PM, SO <sub>2</sub> & NO <sub>x</sub>				
	& 860 KW		& 22 m for 860 KW					
		Proposed	Stacks					
3	Steam Boiler (6	Natural Gas	30 m stack Height	PM, SO <sub>2</sub> & NO <sub>x</sub>				
	TPH)							
		Process Stack	ks / Vents					
	Existing Stacks							
1	1 Prilling Tower – 4 - Stack Heigh		Stack Height 68.5 m	PM				
	Nos with Induced 1		with Induced Draft,					
			Vibropriller.					

2	Ammonia Scrubber	-	Venturi Water scrubber & 71 m stack Height	NH <sub>3</sub>
3	Ammonia Plant	-	Stack Height of 40	PM, SO <sub>2</sub> & NO <sub>x</sub>
	Primary Reformer		m	

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

S.	Name of	Source of	Catego		Quant	Mode of	
No ·	Waste	Generation	ry No. (As per Sch- I&II 2016)	As per grante d EC	Addition al	Total after Expansion	Treatment & Disposal Method
1	Discarded Barrels/ Containers / Liners contaminat ed with hazardous chemicals / wastes	Storage & Handling of Raw Materials	Sch- I/33.1	1500 Nos. /year	15000 Nos. HDPE Drums	1500 Nos. Containers/Bar rels /Year, & 15000 Nos. HDPE Drums	Collection, Storage, Decontaminat ion and sale to authorized decontaminati on facility/ authorized recycler.
2	Bags contaminat ed with hazardous chemicals / wastes	Storage & Handling of Raw Materials	Sch- I/33.1	U	150 MT/Year HDPE Bags	150 MT/Year HDPE Bags	Collection, Storage, and sale to authorized recycler.
3	Used oil/ Spent Oil	Process	Sch- I/5.1	88.8 MTPA	0	88.8 MTPA	Collection, storage in MS drum, transportation and disposal by selling to registered Re- refiners.
4	ETP Sludge	In-house ETP	Sch- I/35.3	180 MTPA	0	180 MTPA	Collected in Drying Pits, stored in HDPE bags, Transported and disposed off to GPCB approved TSDF site.
5	Phosphoric acid Sludge	From solids settling in Phosphoric acid storage tank	-	-	150 MTPA	150 MTPA	This will be collected, dried, stored in HDPE bags and

							transported
							transported to IFFCO
							•
							road for use
							in DAP
	<b>G</b> .	A	C 1 T/	100	0	100 MED 4	Manufacture.
6	Spent	Ammonia/U	Sch –I/	100	0	100 MTPA	Collection,
	Catalyst	rea	18.1	MTPA			storage,
		Process					transportatio
							n and
							disposal by
							selling to
							registered
				A	-		and
				677TH	-		authorized
				100	5.7 535	4.75	recyclers.
7	Spent	Ammonia/	Sch-I/	228	0	228 MTPA	Collection,
	Carbon	DM Plant	18.2	MTPA	_	JO25	storage in
		Process	A 79	100		X13V	HDPE bags,
		11/					Transportatio
		7//				100	n and
		//		-	- T	1.7	disposal to
		100		7		11/1	authorized
		/ 107/	7 40		7 1 4	A 11	TSDF site /
		/ % /		No.		Dec 1	Co-
		1 17	m			NO.	processing at
		1 b #			100	12/14 A	authorized
		1 10.77	$A \setminus A$	100	7/1	W L'ALL	cement
						2 2 2 2 2	industries.
8	Spent	200	Sch-I/	228	0	228 M <sup>3</sup> /Year	Collected
	Resin	DM Plant	35.2	$M^3/Ye$		- // / .G	and stored in
		Process		ar			HDPE bags,
		2 / 1				1 84	Transported
		72 N	No. 1			1.8	and disposed
		Car			_	100	off to
		13	-		-	N. 3	authorized
		- 1	19.		- A	9 '	TSDF site /
			Tech	e i√ 1	544 P	1 -	Co-
				2 10			processing at
							authorized
							cement
9	MEE	In-house	Sch-	0	91.25	91.25 MTPA	industries. Shall be
9		m-nouse MEE & ETP	I/35.3	U	91.25 MTPA	71.43 WITEA	Collected in
	Sludge		1/33.3		WHA		
		(Proposed Nano					Drying Pits, stored in
		Fertiliser					HDPE bags,
							Transported
		plant)					and disposed
							off to GPCB
							approved
							TSDF site.
							TODE SHE.

- 17. The budget earmarked towards Environmental Management Plan (EMP) is ₹ 932.9 crores (capital) and the Recurring cost (operation and maintenance) will be about ₹116 Crores per annum. Industry proposed to allocate Rs. 0.62 Crores @ 0.1% of total expansion cost towards CER.
- 18. The PP reported that Industry will maintain green area of 47.4266 Ha which is 49.65% of total plot area. As per MoEF&CC requirement, it is mandated to have 33% of green area exclusively for green belt thus, 33.43 Ha of area which is 35% of plot area is provided with green belt area having dense trees and rest area within green area is provided with shrubs, herbs and lawn.
- 19. The PP proposed to set up an Environment Management Cell (EMC) by engaging Director, Environment Health and safety officials for the functioning of EMC.
- 20. The PP reported the following w.r.t carbon sequestration:

S. N o.	Species	Gree n Weig ht of Tree abov e grou	Green weight (includi ng root) (Kg)	Dry Weig ht of tree (Kg)	Weig ht of carbo n in the tree (Kg)	Weigh t of CO <sub>2</sub> (K g)	Weight of CO <sub>2</sub> Sequeste red in tree per year (Kg)	No of tree propos ed	Weight of CO <sub>2</sub> Sequeste red in tree per year (Tonnes)
		nd level	25/				V /		
1	Acacia senegal	676	811.2	588.1 2	294.0	1078.1 1	107.81	1650	79.41
2	Aegle marmelos	784	940.8	682.0 8	341.0	1250.3 5	125.04	1840	102.71
3	Albizia lebbeck	956.2 5	1147.5	831.9	415.9	1525.0 7	152.51	2430	165.44
4	Azadiracht a indica	784	940.8	682.0 8	341.0	1250.3 5	125.04	2200	122.80
5	Bauhinia racemose	676	811.2	588.1 2	294.0	1078.1	107.81	3600	173.27
6	Bauhinia variegata	676	811.2	588.1 2	294.0	1078.1	107.81	2760	132.84
7	Bauhinia purpurea	676	811.2	588.1	294.0	1078.1 1	107.81	1200	57.76
8	Bougainvil lea spectablis	345.6	414.72	300.6 7	150.3	551.18	55.12	890	21.90
9	Cassia fistula	843.7 5	1012.5	734.0 6	367.0 3	1345.6 5	134.56	1650	99.12
10	Dalbergia sissoo	1152	1382.4	1002. 24	501.1	1837.2 6	183.73	1850	151.74
11	Delonix regia	1152	1382.4	1002. 24	501.1	1837.2 6	183.73	2800	229.66
12	Ficus benghalen sis	1152	1382.4	1002. 24	501.1	1837.2 6	183.73	3950	323.98
13	Ficus racemose	1216	1459.2	1057. 92	528.9 6	1939.3 3	193.93	3200	277.05

14	Ficus	1088	1305.6	946.5	473.2	1735.1	173.52	3000	232.39
	religiosa			6	8	9			
15	Madhuca	735	882	639.4	319.7	1172.2	117.22	3000	156.99
	indica			5	3	1			
16	Mangifera	784	940.8	682.0	341.0	1250.3	125.04	1880	104.94
	indica			8	4	5			
17	Melia	633.7	760.5	551.3	275.6	1010.7	101.07	1650	74.45
	azedarach	5		6	8	3			
18	Pongamia	735	882	639.4	319.7	1172.2	117.22	1800	94.20
	pinnata			5	3	1			
19	Syzygium	1012.	1215	880.8	440.4	1614.7	161.48	1890	136.25
	cumini	5		8	4	8			
20	Tamarindu	980	1176	852.6	426.3	1562.9	156.29	2920	203.74
	s indica			0	0	4			
21	Tectona	833	999.6	724.7	362.3	1328.5	132.85	3210	190.38
	grandis			1	6	0	MON		
22	Terminalia	784	940.8	682.0	341.0	1250.3	125.04	1740	97.13
	arjuna		900	88	4	5	A COLOR		
23	Terminalia	784	940.8	682.0	341.0	1250.3	125.04	1640	91.54
	bellirica	1	/ _3	8	4	5			
24	Terminalia	14.4	17.28	12.53	6.26	22.97	2.30	1490	1.53
	catappa								
25	Thevetia	6.75	8.1	5.87	2.94	10.77	1.08	760	0.37
	peruviana			404			- I		
			- //			10	Total	55000	3321.22
			47				15/16		100

- 21. The PP submitted the disaster and Onsite and Offsite Emergency Plans in the EIA report.
- 22. The estimated project cost of new Nano Plant is Rs. 490 crores and additional Rs. 50 Crore for CDR in case of lean gas supply in ammonia plant. Total Employment will be 2000 persons during operation phase after expansion.
- 23. The PP reported that Public Hearing is exempted as the project is located in the industrial area i.e GIDC Kalol notified on 07.09.1993.
- 24. 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 of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested 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 inter-alia, deliberated on the Greenbelt development plan, Effluent treatment plant, DAP product and advised the PP to submit the following:

- Undertaking for planting during 1st year and 2nd Year
- Revised ETP flow diagram
- Revised block diagram of Nano DAP.

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC deliberated the Onsite and Offsite Emergency plans and also the various mitigation measures proposed during implementation 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, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, as amended from time to time.

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 Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance. The minutes of the meeting are available on PARIVESH.

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.

25. Based on the proposal submitted by the PP and recommendations of the EAC (Industry-3 Sector), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for "Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and Nano Micronutrients of production capacity (Ammonia- 4,01,500 MTPA, Urea (100%)-6,75,000, Diesel Exhaust Fluid (DEF) (32.5% Urea Solution) upto 4,01,538 (Equivalent to 1,30,500 MTPA Urea), Nano Fertilizers @ Nano Urea/Nano Micronutrients (Nano Zinc/ Nano Copper/ Nano Boron/ Nano Sulphur)/Nano DAP (Nano I + Nano II)- 100375 KLPA) located at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanej, Kasturinagar, Kalol GIDC, District Gandhinagar, Gujarat by Indian Farmers Fertilizer Cooperative Limited (IFFCO)" under the provisions of the EIA Notification 2006 and its subsequent amendments subject to the compliance of terms and conditions as under:-

#### **A. Specific Conditions:**

(i) The PP shall develop Greenbelt over an area of at least, 16165.45 m2 by planting 40,000(1st year) number of trees within a period of one year of grant of EC and 15,000 (2nd year) (2024). The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2m). The budget earmarked for the plantation shall be shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.

- (ii) 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 Environmental Management and Monitoring functions by engaging Director- environment officials, 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. The 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 the previous year.
- (iii) 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 proposed under EMP [₹932.9 crores (Capital cost) and ₹ 116 crores (Recurring cost)] shall be kept in a 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 the previous year.
- (iv) The total freshwater requirement after expansion will be 10190 KLD (in Phase-I) and 10614 KLD (in Phase-II). Fresh water will be met by Sardar Sarovar Narmada Nigam Ltd. (SSNNL). The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawal only after obtaining prior agreement 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
- (v) No banned chemicals shall be manufactured by the PP. No banned raw materials shall be used in the unit. The PP shall adhere to the notifications/guidelines of the Government in this regard.
- (vi) The PP 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.
- (vii) The project proponent shall comply with the environment norms for Fertilizer 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.
- (viii) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP 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.
- (ix) 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.

- (x) The PP shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (xi) As committed by the PP, Zero Liquid Discharge shall be ensured. the domestic wastewater shall be partially treated in the existing ETP and flushing wastewater shall be discharged to soak pits. ETP plant shall be installed total capacity of 35 KLD. Out of 35 KLD, MEE, Stripper and AFFD will have capacity of 25 KLD. Treated water shall be reused for horticulture/gardening/green belt development purposes.
- (xii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xiii) 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.
- (xiv) 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.
- (xv) Proper Ventilation with adequate air change cycle shall be made for healthy working environment for the workers. Work Zone monitoring should be done for VOC.
- (xvi) 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.
- (xvii) The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xviii) 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 flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xix) The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xx) 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.

- (xxi) The Plastic Waste Management (Amendment) Rules, 2022 shall be duly complied w.r.t Extended Producer Responsibility (EPR) target as a brand owner.
- (xxii) 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.

#### **B.** General Conditions:

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/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.
- (ii) 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.
- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) 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).
- (v) 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.
- (vi) 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.
- (vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZillaParishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (viii) 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.
- (ix) The environmental statement for each financial year ending 31<sup>st</sup> 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- 26. 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.
- 27. Concealing factual data submission of false/fabricated data or and failure of to comply with any the conditions mentioned above may in withdrawal result of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- 28. Any appeal against this environmental clearance 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.
- 29. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

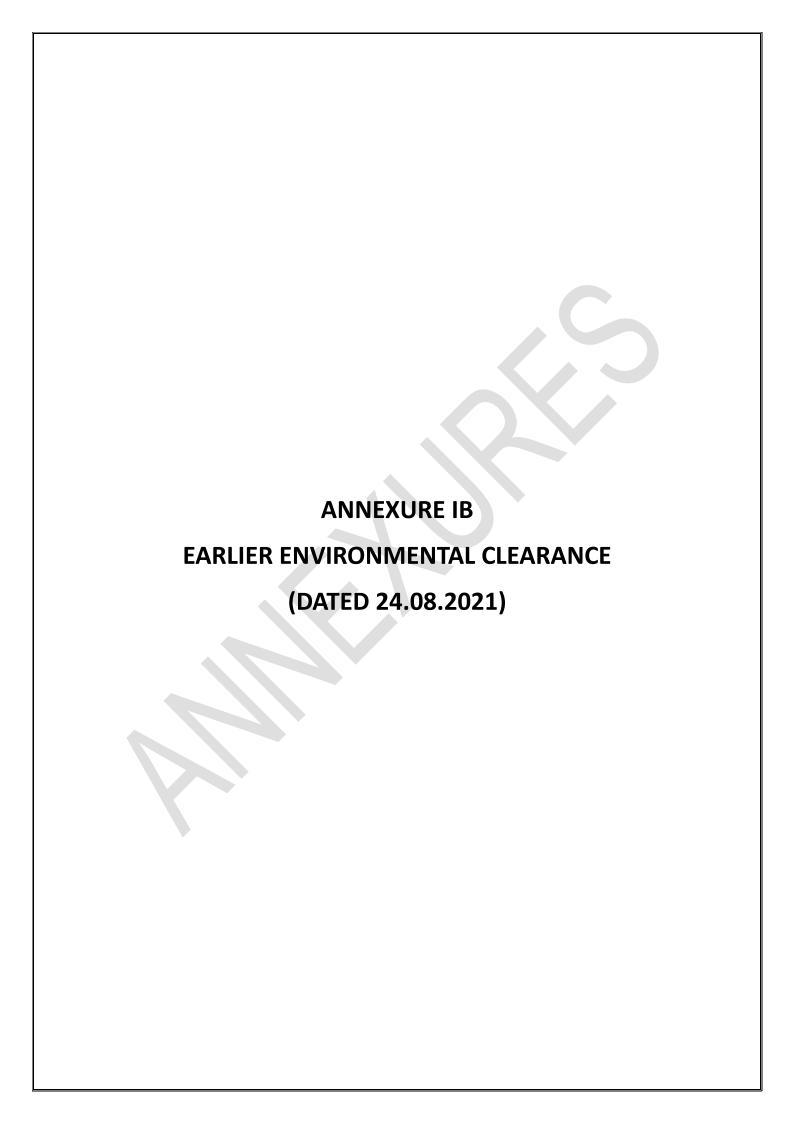
This issues with approval of the competent authority.

(Dr. M. Ramesh) Scientist 'E'

#### Copy to:

- 1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> 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 Gandhinagar, Gujarat.
- 7. Guard File/Monitoring File/PARIVESH.





# F.No. J-11011/60/2009-IA-II(I) Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

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Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 110003

Dated: 24th August, 2021

To,

M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO)

Kasturinagar (PO), Kalol District Gandhinagar, Gujarat – 382 423

Email: iffcofertilizer2020@gmail.com

Sub: Expansion of Fertilizer Plant by Installation of new Nano Urea Plant at Plot No. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Gandhinagar, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited- Environmental Clearance – regarding.

Sir,

This has reference to your proposal No. IA/GJ/IND3/217176/2021 dated 30<sup>th</sup> July 2021, submitting addendum to the EIA/EMP report on the above subject matter.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Expansion of Fertilizer Plant by Installation of new Nano Urea Plant by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) at Plot No. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Gandhinagar, Gujarat.
- 3. The details of products and capacity are as under:

S. No	Product	Unit	As per EC granted on 01/02/2021	Additional / Proposed	Total after Expansion
1.	Ammonia	MTPA	4,01,500	0	4,01,500
2.	Urea (100%) (Fertilizer Grade/Technical Grade)	MTPA	6,75,000 max or	0	6,75,000 max or
3.	Urea (100%) or & Diesel Exhaust Fluid (32.5% of Urea Solution)	MTPA	5,44,500 & 4,01,538 i.e., (Equivalent to 1,30,500 of 100% Urea) max or #	0	5,44,500 & 4,01,538 i.e., (Equivalent to 1,30,500 of 100% Urea) max or #

4.	Urea (100%) or & Diesel Exhaust Fluid (40% of Urea Solution)		5,44,500 & 3,26,250 i.e., (Equivalent to 1,30,500 of 100% Urea) max #	0	5,44,500 & 3,26,250 i.e., (Equivalent to 1,30,500 of 100% Urea) max #
5.	Nano Fertilisers (Nano-Nitrogen (Urea) / Nano Zinc/Nano Copper*) (Nano-I + Nano-II)	KL / year	27375	36500	63875

Note: # Depending upon the requirement of urea fertilizer in the market, there shall be variation in quantity of DEF (32.5% and/or 40% urea Solution) production. The total urea production shall, however, be limited to 6,75,000 MTPA (Maximum) under all the above combinations.

4. It is noted that the project proponent has proposed for enhancement of Nano Fertilizer production by installation of new Nano-Nitrogen (Nano Urea) Plant (Nano-II) of capacity 36500 KL per annum along with Bottle manufacturing and bottling unit besides auxiliary facilities. The plant will be established over area of 2.3491 Hectares in existing premises.

It is also noted that the manufacturing process of Nano Urea comprises of polymerization reaction of carbohydrate polymer with nucleation and attachment of nanocluster with amide/nitrate particles. No source of air emission/effluent generation/hazardous waste generation is involved in the production process. It is noted that the nano-fertilizer plant will pose an example of environmental sustainability and profitability for both farmers and government.

- 5. It is reported that the existing land area is 95.5158 ha and expansion is proposed within the existing land area. Industry has developed greenbelt in an area of 46.18 ha which will be increased to 46.6257 ha, covering 48.8% of the project area. The estimated project cost for expansion is Rs. 225 crores. Industry has spent Rs. 4811.8 lakhs towards environmental pollution control measures. The capital cost earmarked towards environmental pollution control measures in expansion is Rs. 115 lakhs and recurring cost (operation and maintenance) for proposed project will be about Rs. 10 lakhs per annum. The project will lead to employment for 1668 persons directly & indirectly after expansion. Industry proposed to allocate Rs. 62 lakhs towards Corporate Environment Responsibility.
- 6. It is reported that there are no National parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife sanctuary, Reserve forests within 10 km from the project site. Sabarmati river is flowing at 12.8 km (ESE) from the project site, and Narmada Canal is flowing at 2.8 km (S) from the project site.
- 7. It is noted that the freshwater requirement after expansion in Phase I including proposed nano fertilizer plant will be 10069 KLD and in Phase II with CDR and nano

<sup>\*\*</sup> Phase I include supply of Rich gas and manufacturing unit of Nano Fertiliser products & Phase II include installation of CDR during supply of lean gas.

<sup>\*</sup> Nano Nitrogen contains 40000 ppm (Min) of nitrogen, Nano Zinc contains 10000 ppm (Min) of Zinc and Nano copper contains 8000 ppm (Min) of copper.

fertilizer plant will be 10493 KLD. Water will be made available from existing infrastructure of Narmada Canal water supply system to IFFCO Kalol Unit.

Total effluent generation after expansion including domestic will be 1449.5 KLD in Phase I and 1509.5 KLD in Phase II. The wastewater from Ammonia and Urea plant is being treated in Hydrolyser, process condensate stripper, ETP, etc., Treated water from treatment schemes are being Horticulture/gardening/green belt development. For Nano-I plant, separate Effluent Treatment System (ETS) of capacity 1 KLD cum neutralization tank for treatment of Reactor Wash / Floor wash and STP (Capacity- 10 KLD) for domestic wastewater has been installed in the plant. Treated water from both the schemes will be reused for horticulture/gardening/ green belt development. Likewise, Effluent Treatment System (ETS) of capacity 1.5 KLD with neutralization tank for reactor wash/floor wash and STP (Capacity- 15 KLD) for domestic wastewater treatment will be Treated installed in Nano-II unit. water will be reused for horticulture/gardening/greenbelt development purposes within the plant premises. The plant will be based on Zero Liquid discharge system.

Total power requirement after expansion in Phase I and Phase II will be 224 MW/day and 247 MW/day respectively and same will be met from UGVCL power supply. Existing unit has two DG Sets of Capacity 2200 kW & 860 kW as standby during power failure. Stack Height of 24 m for 2200 KW & 22 m for 860 KW is provided as per CPCB norms.

Existing unit has Natural gas based 80 TPH steam boiler. No additional Boiler is proposed. 35 m stack height has been provided and particulate emission is within the statutory limit of 150 mg/Nm³. It is noted that the proposed Nano Urea Plant does not emit air pollutants from production process. Details of flue gas stacks, process gas stacks, solid waste/hazardous waste disposal of the entire complex are as per the plan provided in the EIA/EMP report and as deliberated in the EAC.

- 8. The project/activities are covered under Category 'A' of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.
- **9.** The proposal has been submitted as per para 7(ii) of the EIA Notification,2006 & its subsequent amendments requesting exemption from ToR and EIA report. Public hearing is exempted as the project site is located within the notified Industrial area. The project proponent has reported that there are no litigation pending against the proposal.
- **10.** The Ministry had issued EC earlier vide letter no. J-11011/60/2009-IA-II(I) dated 1<sup>st</sup> February,2021 in favour of M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) for Expansion/Modernization of the Fertilizer Plant located at Kalol, Gujarat. It has been informed that construction and modification work as per EC is completed at the site after obtaining CTE from the GPCB. The certified compliance report has been forwarded by the Ministry's Regional Office at Bhopal vide letter dated 10<sup>th</sup> August, 2021.
- 11. The proposal was considered by the Expert Appraisal Committee (Industry-3 Sector) in its meeting held on 10-11 August, 2021 in the Ministry through video conferencing, wherein the project proponent and the accredited consultant M/s

EQMS India Pvt Ltd presented the proposal and addendum to the EIA/EMP report.

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with Addendum to EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent 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 Addendum to 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 project proponent.

The Committee noted that the proposal has been submitted by the project proponent as per the provisions contained in para 7 (ii) (a) of the EIA Notification seeking exemption from ToR and EIA report. Public hearing is exempted as the project is located in the notified Industrial area/Estate. The Committee noted that the addendum to the EIA/EMP report are in compliance of the activities proposed for the project, considering the present environmental concerns and the projected scenario for all the environmental components. The Committee noted that there is no anticipated air emission from Nano Urea Plant production process. The Committee noted that the project proponent allocated Rs. 36.5 lakhs towards Wild Life Conservation and submitted action plan in this regard.

The Committee noted that the Ministry had issued EC earlier vide letter dated 1st February, 2021 in favour of M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) for Expansion/Modernization of the Fertilizer Plant located at Kalol, Gujarat. It is also noted that the construction and codification work as per EC granted has been completed at the site. The certified compliance report forwarded by the Ministry's Regional Office at Bhopal vide letter dated 10th August, 2021 after conducting site visit on 27.07.2021 found to be satisfactory. The Committee also noted that there is no additional land required and the proposed unit shall be established in the existing premises.

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 Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance as per para 7 (ii)(a) of the EIA Notification, 2006 exempting ToR and EIA report.

12. The environmental clearance granted 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 project proponent 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.

EO for M/s Indian Farmers Fertiliser Cooperative Limited

- 13. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), Ministry of Environment, Forest and Climate change hereby accords Environmental clearance to the project for Expansion of Fertilizer Plant by Installation of New Nano Urea Plant by M/s Indian Farmers Fertiliser Cooperative Limited at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Gandhinagar, Gujarat, under the provisions of the EIA Notification, 2006 subject to the compliance of terms and conditions as under:-
- (i) All the specific and general conditions stipulated in the environmental clearance dated 1<sup>st</sup> February, 2021 shall be complied in letter and spirit.
- (ii) 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, MoEFCC in this regard.
- (iii) 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 addendum to the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv) Total fresh water requirement shall not exceed 10069 KLD (in Phase I) and 10493 KLD (in Phase II). Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (v) 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.
- (vi) As proposed, at least Rs. 36.5 lakhs shall be earmarked for conservation plan and shall be implemented in coordination with State Forest & Wildlife Department/Local Village Administration.
- 14. 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.
- Concealing factual data or submission of false/fabricated data 15. and of the conditions mentioned above failure to comply with any may the withdrawal of this clearance and attract action under provisions of the Environment (Protection) Act, 1986.
- **16.** Any appeal against this environmental clearance 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.
- 17. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other

Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

18. This issues with approval of the competent authority.

(Dr. R. B. Lal)

Scientist 'E'/Additional Director

Tele-fax: 011-24695362 Email-rb.lal@nic.in

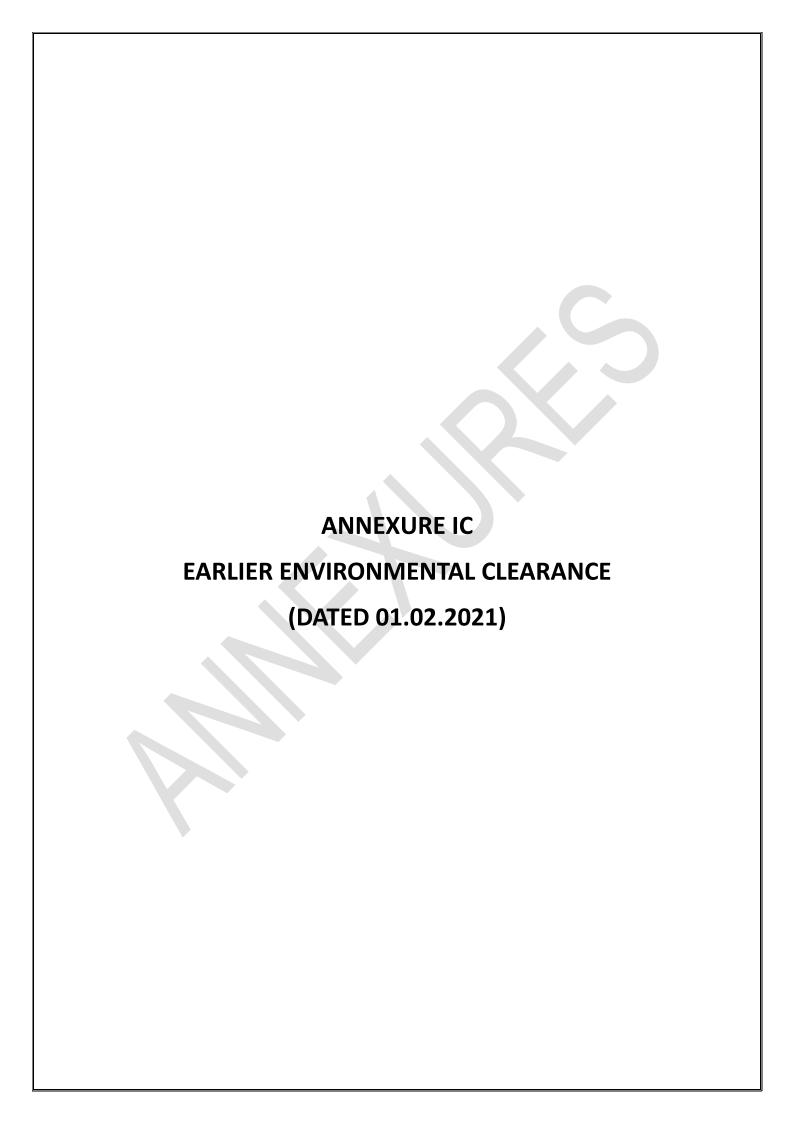
(डा. आए. बी. लाल)
(Dr. R. B. LAL)
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min.of Environment, Forest and Climate Change
भारत संस्कार, नई दिल्ली

#### Copy to: -

- The Deputy DGF (C), MoEF&CC Integrated Regional Office (Gujarat), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal -16
- 2. The Secretary, Forests and Environment Department, Government of Gujarat, Block 14, 8th Floor, Sachivalaya, Gandhinagar (Gujarat) -10
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi 32
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar (Gujarat) 10
- 5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi -110001
- 6. The District Collector, District Gandhinagar (Gujarat)
- 7. Guard File/Monitoring File/Website/Record File/Parivesh Portal

(Dr. R. B. Lal)

Scientist 'E'/Additional Director





# F.No. J-11011/60/2009-IA-II(I) Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

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Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 110003

Dated: 1st February, 2021

To

M/s Indian Farmers Fertiliser Cooperative Limited

Kalol Unit, P.O. Kasturinagar District Gandhinagar, Gujarat – 382 423

Email: iffcofertilizer2020@gmail.com

Sub: Expansion/Modernization of the Fertilizer Plant at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Ghandhinagar, Gujarat by M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO) - Environmental Clearance - regarding

Sir,

This has reference to your proposal No. IA/GJ/IND2/185904/2009 dated 14<sup>th</sup> December 2020 and further letter dated 12.01.2021 & E-Office Computer number 149352, submitting the EIA/EMP report on the above subject matter.

- The Ministry of Environment, Forest and Climate Change has examined the 2. proposal for environmental clearance to the project for Expansion/Modernization of the Fertilizer Plant by M/s Indian Farmers Fertiliser Cooperative Limited at Plot no. 712/846, 855, 856 of Saij, 17-37 of Dhanaj, Kasturinagar, Kalol, District Ghandhinagar, Gujarat. Industry proposes to enhance the production of Urea from 6,02,250 MTPA to 6,75,000 MTPA, while the production of Ammonia plant will remain the same i.e., 4,01,500 MTPA. The unit also proposes to install Commercial-scale Nano Fertiliser Project having capacity of Nano-Nitrogen/Nano-Zinc/Nano-Copper of 27375 kL/year along with bottle manufacturing and bottling unit besides auxiliary facilities. The proposal has been bifurcated in two stages. Phase I - Enhance Urea production with Supply of Rich gas and installation of Commercial-scale Nano Fertiliser Project and Phase II - Enhance Urea production with Supply of lean gas with installation of Carbon dioxide Recovery Unit (CDR). The phase II will be implemented only when there will be supply of lean gas. In phase II, 200 MTPD of CO2 shall be recovered from the flue gas through CDR for production of Urea.
- 3. The details of products and capacity are as under:

S.	Product	Unit	Quantity			
No.			Existing Additional/ After		After Modernization/ Expansion	
1.	Ammonia	MTPA	4,01,500	0	4,01,500	
2.	Urea (100%) (Fertilizer	MTPA	6,02,250 max or	72,750	6,75,000 max or	

	Grade/Technical Grade)				
3.	Urea (100%) or & Diesel Exhaust Fluid (32% of Urea Solution)	MTPA	5,44,500 & 1,77,690 i.e., (Equivalent to 57,750 of 100% Urea) max or	2,23,848 (32.5% Urea solution) i.e., (72,750 of 100% Urea) or	5,44,500 & 4,01,538 i.e., (Equivalent to 1,30,500 of 100% Urea) max or #
4.	Urea (100%) or & Diesel Exhaust Fluid (40% of Urea Solution)	MTPA	5,44,500 & 1,44,375 i.e., (Equivalent to 57,750 of 100% Urea) max	- & 1,81,875 (40% Urea solution) i.e., (72,750 of 100% Urea)	5,44,500 & 3,26,250 i.e., (Equivalent to 1,30,500 of 100% Urea) max #
5.	Nano Fertilisers (Nano-Nitrogen/ Nano Zinc/Nano Copper*)	kL/year	0	27375	27375

#### Note:

- 4. The existing land area is 95.5158 ha and expansion is proposed within the existing land area. Industry has already developed greenbelt in an area of 45.71 ha which will be increased to 46.1756 ha i.e., 48.34% after expansion. The estimated project cost for expansion is Rs. 166.8 crores. Industry has already spent Rs. 4341.8 lakhs towards environmental pollution control measures. The capital cost earmarked towards environmental pollution control measures in expansion is Rs. 100 lakhs and recurring cost (operation and maintenance) will be about Rs. 1500 lakhs per annum. The project will provide employment for 1393 persons after expansion. Industry proposed to allocate Rs. 52 lakhs towards Corporate Environmental Responsibility.
- 5. There are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife sanctuary within 10 km distance from the project site. Sabarmati river is flowing at 12.8 km (ESE) from the project site, and Narmada canal is flowing at 2.8 km (S) from the project site.
- 6. The water requirement after expansion in Phase I including nano fertilizer plant will be 9947 KLD and in Phase II with CDR and nano fertilizer plant will be 10371 KLD. Water will be available from existing infrastructure of Narmada Canal water supply system to IFFCO Kalol Unit.

Effluent of 1423 KLD in Phase I and 1483 KLD in Phase II from Ammonia and Urea plant will be treated in the ETP and 1 KLD of Industrial effluent and 9 KLD of Domestic effluent from proposed Nano plant will be treated in Effluent Treatment

<sup>#</sup> Depending upon the requirement of urea fertilizer in the market, there shall be variation in quantity of DEF (32.5% and/or 40% urea Solution) production. The total urea production shall, however, be limited to 6,75,000 MTPA (Maximum) under all the above combinations.

<sup>\*\*</sup> Phase I include supply of Rich gas and new manufacturing unit of Nano Fertilizer products & Phase II include installation of CDR during supply of lean gas.

Nano Nitrogen contains 40000 ppm (Min) of nitrogen, Nano Zinc contains 10000 ppm (Min) of Zinc and Nano copper contains 8000 ppm (Min) of copper.

System (ETS) cum neutralization tank and STP respectively. The treated water will be reused in Horticulture and plant will be based on Zero Liquid discharge system.

Power requirement after expansion in Phase I and Phase II will be 186 MW/day and 211 MW/day respectively and same will be met from UGVCL power supply. Existing unit has two no. of DG Sets of Capacity 2200 kW & 860 kW as standby during power failure. Stack Height of 24 m for 2200 KW & 22 m for 860 KW is provided as per CPCB norms. Existing unit has Natural gas based 80 TPH steam boiler. No additional Boiler is proposed. 35 m stack height has been provided for controlling the particulate emission within the statutory limit of 150 mg/Nm³.

No additional Stack is proposed in expansion and there shall be no gaseous emission from Nano Fertiliser Unit. There is generation of different kind of Industrial hazardous wastes from production process and other activities. Industrial hazardous wastes such as spent lube oil, spent catalyst are sold to recyclers. ETP sludge generated is disposed off at TSDF site, while other solid wastes are segregated in salable and non-salable waste. All waste is disposed as per The Hazardous & Other Waste (Management and Transboundary Movement) Amendment Rules, 2020.

- 7. The project/activities are covered under category A of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.
- **8.** The Standard Terms of Reference (ToR) was issued by the Ministry vide letter dated 6<sup>th</sup> November, 2020. Public hearing is exempted as the project site is located within the notified Industrial area. The project proponent has informed that there is no litigation pending against the proposal.
- It was informed that the plant was established in the year 1975 to produce Ammonia and Urea. The Ministry had earlier granted environmental clearance vide letter dated 24th December, 2009 to the project for Expansion of Kalol Fertilizer unit. It was informed that the proposal envisaged expansion of Ammonia & Urea Project for 2400 MTPD Ammonia & 4200 MTPD Urea and Captive power plant of capacity 2x25 MW. The expansion was proposed to be carry out on 18 ha vacant lands available within the plant area, but the expansion work was not initiated because the Department of Fertilizer, GOI vide letter dated 9th May 2013 advised that the project work should proceed ahead only after approval of the Department of Fertilizer. However, single walled Ammonia Storage Tank was replaced with new Ammonia storage tank of double wall double integrity type considering safety aspects and as per one of the conditions of the environmental clearance. The unit has valid amended Consolidated Consent and Authorization (CC&A) from GPCB vide order dated 22.10.2019 for production of 4,01,500 MTPA of Ammonia, 6,02,250 MTPA of Urea (100%) Max or, 5,44,500 MTPA Urea & 1,77,690 MTPA of DEF (32.5% of urea solution) Max or, 5,44,500 MTPA Urea & 1,44,375 MTPA of DEF (40% of urea solution) Max for the existing project. The Ministry's Regional Office at Bhopal vide letter dated 2<sup>nd</sup> November, 2020 has forwarded the compliance status of the existing environmental clearance conditions.
- 10. The proposal was considered by the Expert Appraisal Committee (Industry-3) in its meetings held on 29-30 December, 2020 & 14-15January, 2021 in the Ministry, wherein the project proponent and their accredited consultant M/s EQMS India Pvt Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP

Cor M/s Indian Farmers Fertiliser Cooperative Limited

report complying with the ToR and recommended the project for grant of environmental clearance.

11. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given 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 report. 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 project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the activities/action plan and found to be addressing the issues in the study area. The Committee has suggested that the storage of toxic/explosive raw material shall be bare minimum in quantity and inventory.

The EAC has deliberated the proposal and has made 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 Experts Members of the EAC have found the proposal in order and have recommended for grant of environmental clearance.

- 12. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent 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.
- 13. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for Expansion/Modernization of the Fertilizer Plant by M/s Indian Farmers Fertiliser Cooperative Limited at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanaj, Kasturinagar, Kalol, District Ghandhinagar, Gujarat, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-
- (i) 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.

- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development.
- (iii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (iv) 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.
- (v) 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.
- (vi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (vii) 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.
- (viii) Safety and risk assessment studies shall be conducted and action plan and mitigation measures shall be properly implemented.
- (ix) 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 flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.99% with effective chillers/modern technology.
- (xi) Total fresh water requirement shall not exceed 10371 cum/day proposed to be met from existing water supply from Narmada canal to the IFFCO Kalol unit. Necessary permission in this regard shall be obtained from the concerned regulatory authority, and renewed from time to time.
- (xii) Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xiii) The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b)

Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

- (xiv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xv) The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xvi) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- **13.1** The grant of environmental clearance is further subject to compliance of other general conditions as under:-
- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations

- for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration.
- (ix) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (x) 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.
- (xi) 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.
- (xii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (xiv) 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 <a href="https://parivesh.nic.in/">https://parivesh.nic.in/</a>. 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.
- (xv) 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.
- (xvi) 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.

Le for M/s Indian Farmers Fertiliser Cooperative Limited

- 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.
- 15. Concealing factual data submission of false/fabricated or data and failure comply with any of the conditions mentioned above may withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- Any appeal against this environmental clearance 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.
- 17. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- 18. This issues with approval of the competent authority.

Ollokori (Dr. R. B. Lal)

Scientist 'E'/Additional Director

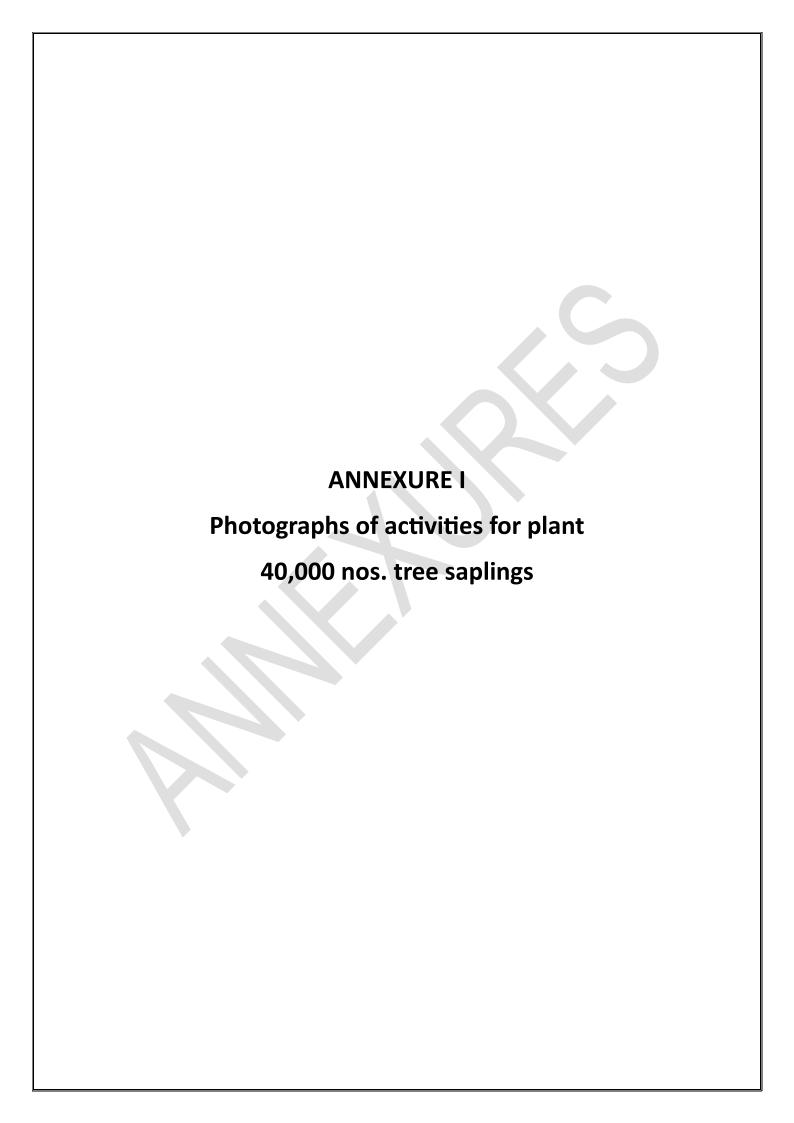
Tele-fax: 011-24695362 (pr.Email-rb.lal@nic.in

वैज्ञानिक 'ई'/Scientist 'E' पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय Min.of Environment, Forest and Climate Change भारत सरकार, नई विल्ली Govt, of India, New Delhi

#### Copy to: -

- 1. The Deputy DGF (C), MoEF&CC Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal -16
- 2. The Secretary, Forests and Environment Department, Government of Gujarat, Block 14, 8th Floor, Sachivalaya, Gandhinagar (Gujarat) -10
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBDcum-Office Complex, East Arjun Nagar, Delhi - 32
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar (Gujarat) - 10
- 5. The District Collector, District Ghandhinagar (Gujarat)
- 6. Guard File/Monitoring File/Website/Record File/Parivesh Portal

(Dr. R. B. Lal) Scientist 'E'/Additional Director



Photographs of various activities for plantation of 40000 tree saplings at IFFCO – Kalol

Annexure - I



Step – 1 : Some of the Photos showing identified area for tree plantation



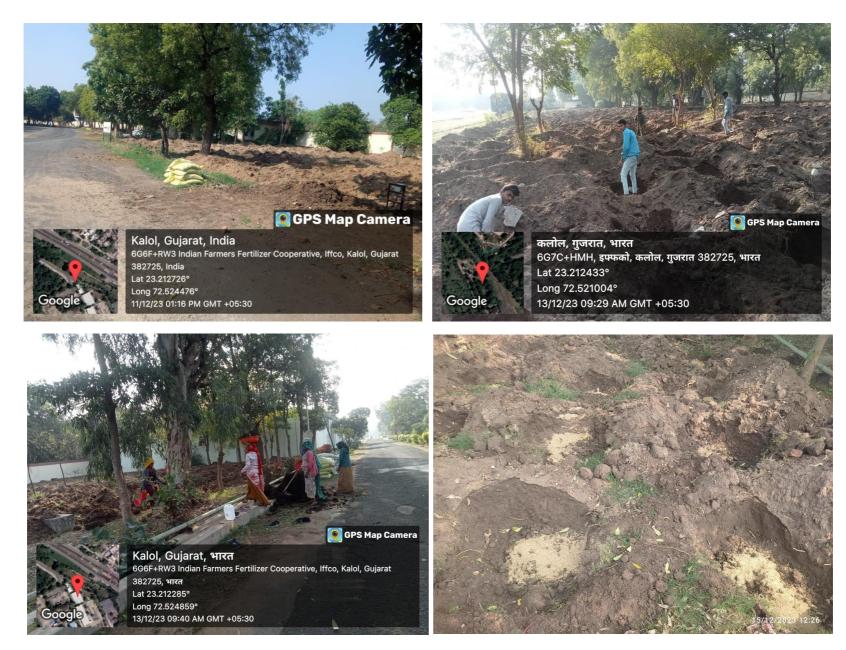
**Step - 2 : Some of the Photos showing site cleaning activities** 



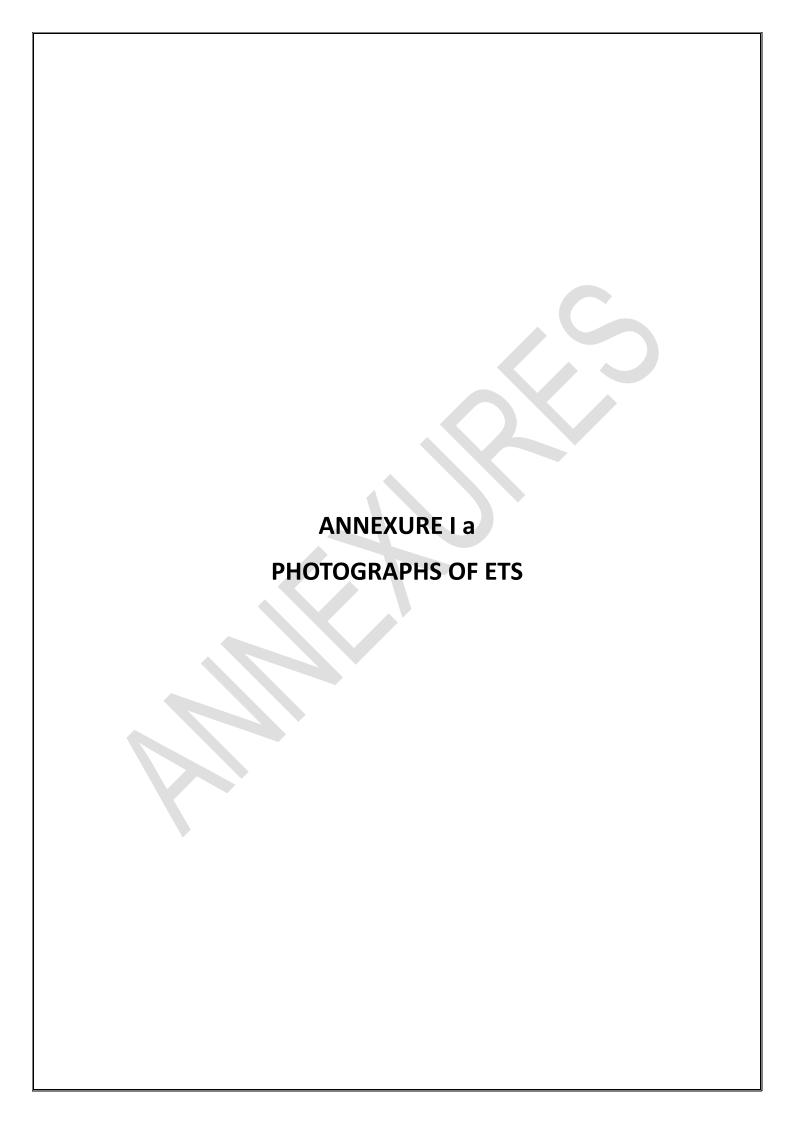
**Step - 3: Some of the Photos showing marking for pits and digging activities** 



Step - 4 : Some of the Photos showing delivery of tree sapling at IFFCO Kalol



Step - 5 : Some of the Photos showing application of nutrients like vemicompost, farm yard manure and rice husk before plantation of tree saplings



## Photos of Effluent Treatment System (ETS) at Nano Fertiliser Plant



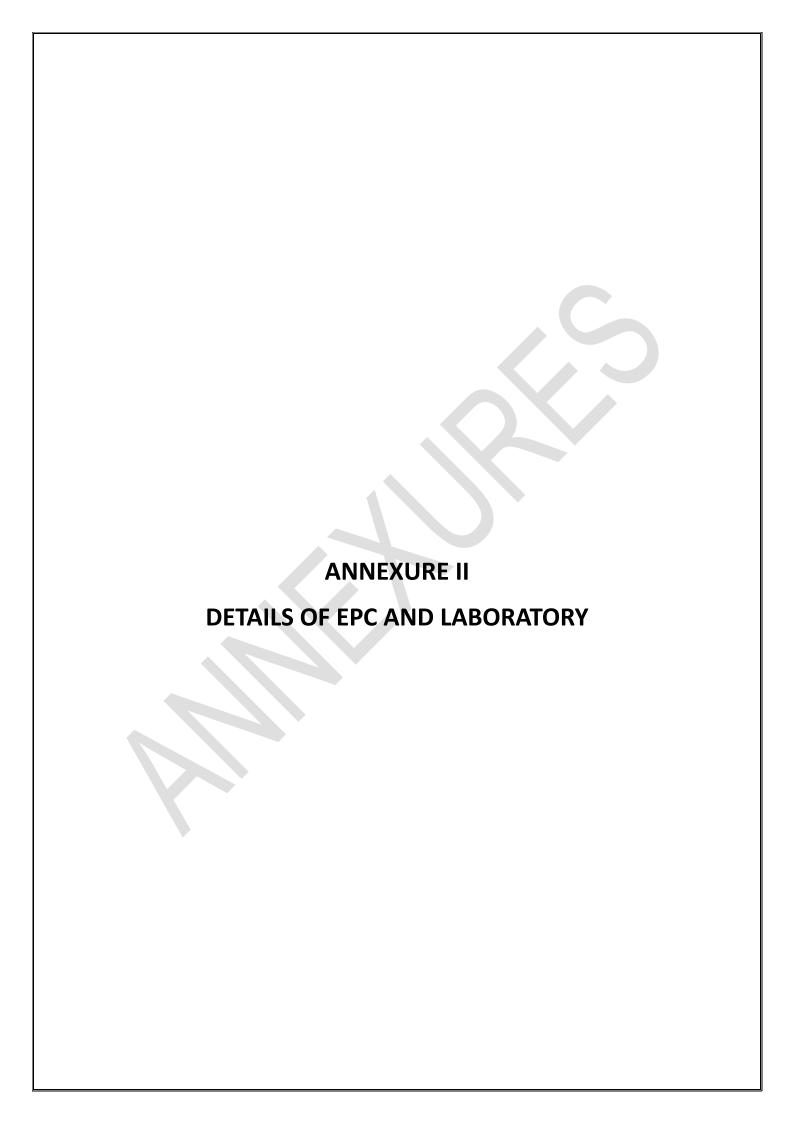














#### **Annexure-II**

## Environmental Management Department & Facilities available in IFFCO Laboratory

IFFCO Kalol Unit committed for continual improvement on its environmental performance. The unit has separate Environmental Management Department and full-fledged laboratory facilities.

The Environment Management department is headed by Jt. GM (Environment & Pollution Control) who reports to Unit Head directly. Two officials are dedicated for normal activities of the section and they directly report to the Jt GM (EPC). Hierarchy of the Section is given in **Figure 1** and Organizational work station w.r.t Environment, Health and Safety is given in **Figure 2**.



Figure 1: Hierarchical of Environmental Management Cell

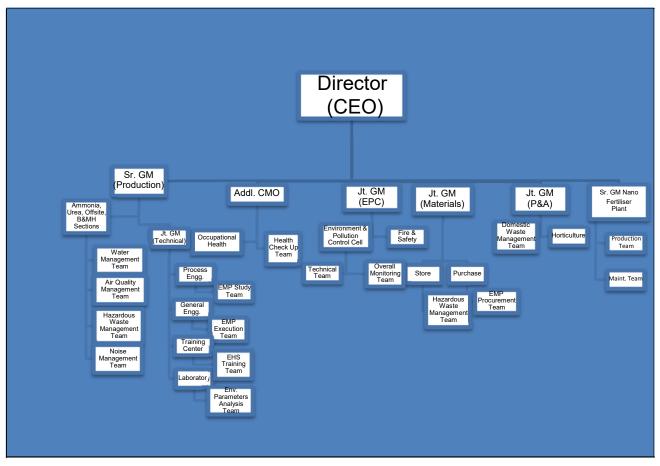


Figure 2: Organizational work station w.r.t Environment, Health and Safety



Jt. GM (EPC) & Head (F&S) and Addl. Chief Medical Officer co-ordinates all related activities Such as Environment, Safety & Health of employees, workers and surrounding community and prepare statistical records.

#### I. Responsibilities of Jt GM (EPC) & Head (F&S) are as below:

- i. Responsible for maintaining Effective Environment Management System with focus on pollution prevention & resource conservation.
- ii. Responsible for maintaing Effective Safety Management System to achieve safe work environment and Zero incident
- iii. Developing and maintenance of green belt with the support of P & A Dept (Horticulture section).
- iv. Environmental monitoring of the plant and surrounding area.
- v. Ensure to carry out EHS Management Plan / programme as per the schedule.
- vi. Regular training to employees on Safety and Environment related Topics.
- vii. Regular monitoring of stacks, ambient air, noise etc either internally or by appointing external agency and data analysis. Corrective and preventive action, wherever required.
- viii. Hazardous wastes management and handling
- ix. Ensure submission of various statutory reports like Environment statement as per form V, Records of Hazardous waste Handling & Management as per form III & IV
- x. Carrying out Environment audit by Schedule I auditor appointed by GPCB,
- xi. Ensuring timely submission of applications for renewal of consents under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 as well as application for authorization and its renewal under Hazardous & Other Waste (Management and Transboundary Movement) Amendment Rules, 2016, and amendment thereof under Environment Protection Act, 1986.

#### II. Responsibilities of Addl. Chief Medical Officer are as below:

- i. Pre, periodical and post medical check of employees
- ii. Conducting audiometry test for employees
- iii. Awareness Training to employees & their dependents on Health
- iv. Proper collection, storage and disposal of biomedical waste.
- v. Medical check-up all contract workmen
- vi. Periodic medical check-up all contract workmen working in hazardous area
- vii. Ensuring required infrastructure at the plant and township dispensary



#### Facilities available in IFFCO laboratory

IFFCO has established laboratory facilities in the plant with 13 skilled personnel for monitoring and analysis. Required facilities for chemical & biochemical analysis has been set up in plant premises. Various quality monitoring instruments are available at Central Laboratory for analysis of (a) raw materials (b) gaseous and liquid composition in the ammonia and urea process (c) Final product (d) HDPE bags for packing of urea. 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.

Treated water from ETP is analyzed for specific parameters every shift of 8 hours duration.  $PM_{2.5}$ ,  $PM_{10}$ , Ammonia, SOx, NOx in ambient air and noise level at different locations of the plant are analyzed / measured every week. Samples from Prill tower vent, BHEL boiler stack, Primary reformer stack are collected and analyzed by IFFCO Lab as per the requirement. All Environment related parameters w.r.t 
Process & Fuel stack emission, ETP outlet and noise level at various locations, Ambient Air are analyzed / measured by NABL approved Laboratory on monthly basis.

List of Instruments available in laboratory pertaining to environmental analysis is given below in **Table 1.** 

Table 1: List of Instruments available in laboratory

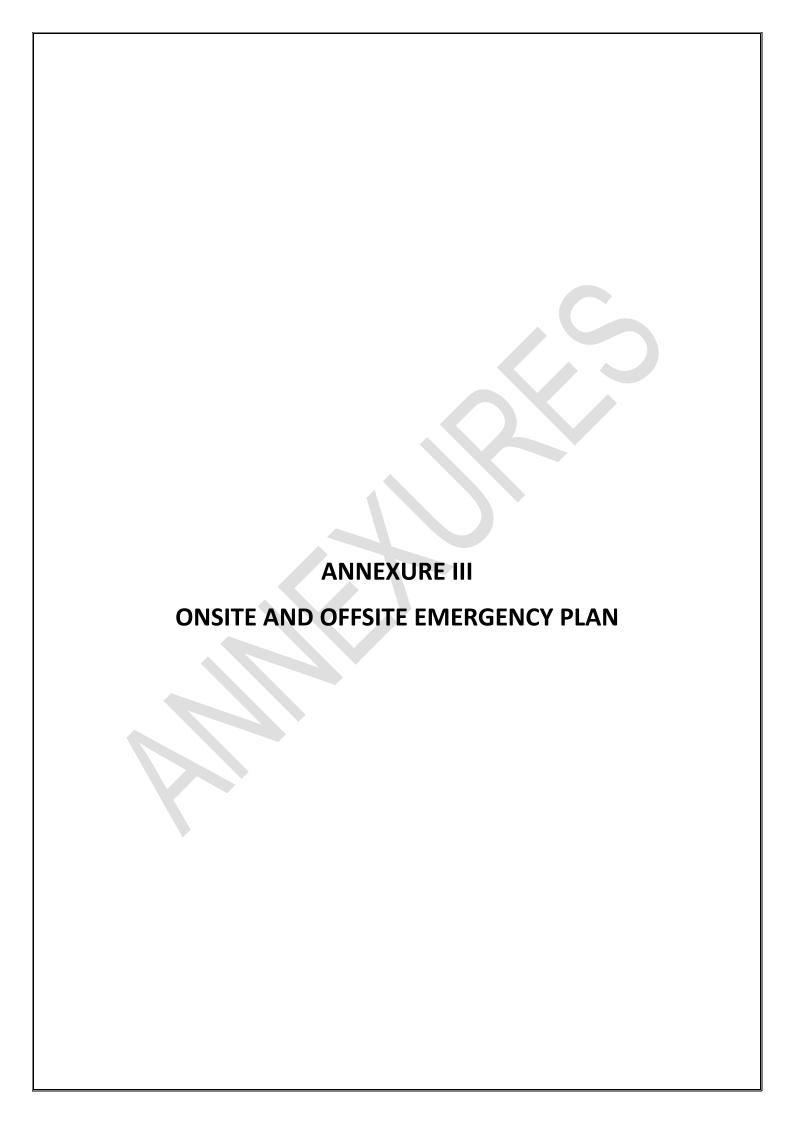
S. No.	Description	S. No.	Description
1	Electronic Balances	18	Stirrer
2	Hot Air Oven	19	Conductivity Meter
3	Muffle Furnace	20	Sound Level Meter
4	Karl Fischer Titrator	21	Flue Gas Analyzer
5	Stack Monitoring Kit	22	Handy Sampler
6	pH Meter	23	B.O.D. Incubator
7	Respirable Dust Sampler	24	Laminar Flow Station
8	Centrifuge Machine	25	Oil Bath
9	Turbidity Meter	26	Auto Titrator
10	Water Purifier Unit	27	Oxygen Meter
11	Wet Gas Flowmeter	28	High Volume Sampler
12	UV-Vis Spectrophotometer 1800 / 1700	29	Humidity Monitor
13	Water Bath	30	Hot Plate
14	Weather Monitoring Station	31	Autoclave
15	Dew Point Analyzer	32	Do Meter
16	Vacuum Pump	33	Magnetic Stirrer
17	Flame Photometer		



#### Photographs of Laboratory is shown in **Figure 3.**



Figure 3: Photographs showing inside view of Laboratory









## **ONSITE EMERGENCY PLAN**



## INDIAN FARMERS FERTILISER CO OPERATIVE LIMITED KALOL UNIT

P.O.KASTURINAGAR DIST: GANDHINAGAR. PIN: 382423

## **ONSITE EMERGENCY PLAN**

IN

## **COMPLIANCE OF**

THE FACTORIES ACT, 1948

[See Section 41 B(4)]

&

THE GUJARAT FACTORIES RULES, 1963

[See Rule 68 J, Schedule – 8(A)]

### PREPARED BY

### FIRE & SAFETY DEPARTMENT

INDIAN FARMERS FERTILISER CO OPERATIVE LIMITED

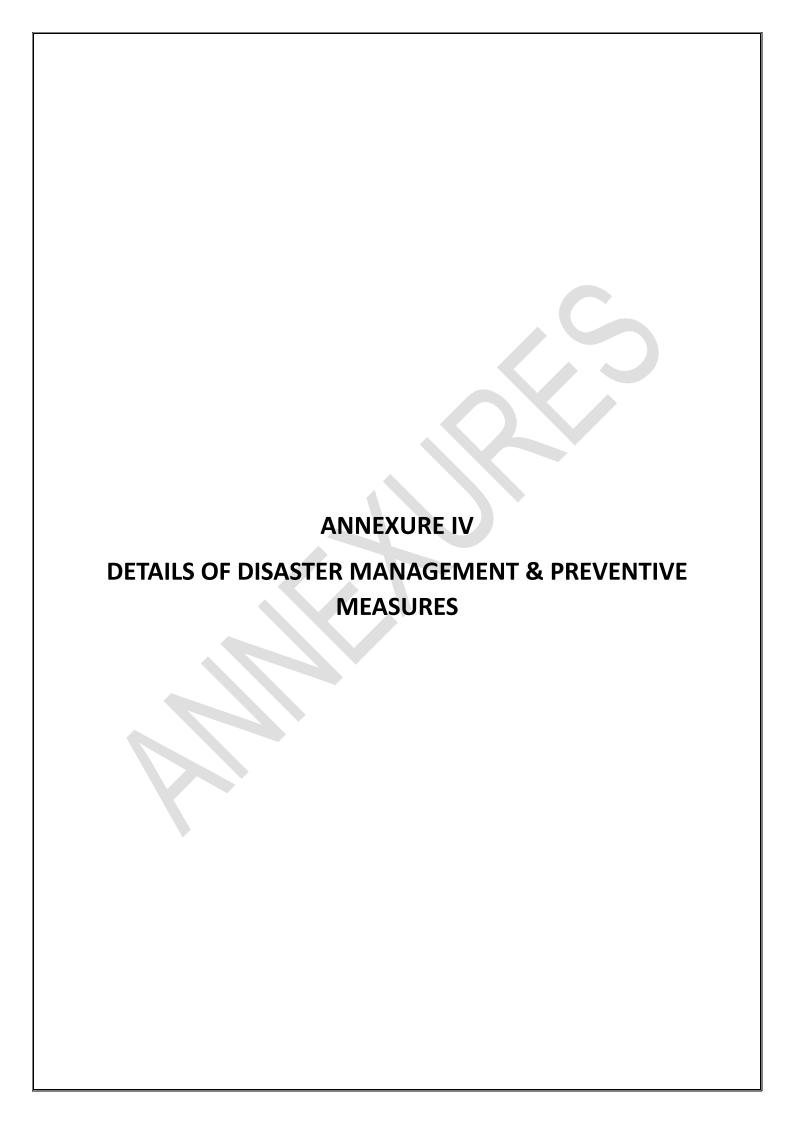
KALOL UNIT

P.O.KASTURINAGAR DIST: GANDHINAGAR. PIN: 382423

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## Details of Disaster Management & Preventive Measures to minimize occupational hazards

#### I. <u>Safety Measures</u>

- OH & S policy at corporate level and IMS policy at Unit level and said Policies of IFFCO are given in Figure 1 and Figure 2.
- Hazard Identification and Risk Assessment
- Work Permit System procedure has been established for safely execution of job.
- Lock Out and Tag Out procedure has been established for Isolation of energized equipment's/machineries.
- Standard Operating procedures.
- Start-up procedure Shut down procedure, emergency procedure.
- Inbuilt safety measures such as trips, alarms, logics.
- All the pressure vessels/pipelines are provided with Safety Relief Valves, Audio-Visual alarms, trips, Safety interlocks.
- Mechanical integrity through Preventive Maintenance for all the machineries at regular intervals.
- Safety instrumentation- DCS System for plant process monitoring.
- Insulation of all the process equipment's which are subjected to high temperature conditions.
- Worker's participation in Safety Management system:- Safety committee meetings, employee suggestion schemes.
- Incident Investigation & reporting.
- Online near miss reporting
- DISH Certified competent persons for issuing work permit to carry out jobs in confined space.
- DISH Approved training centre to impart training for all the level of employees/Contract workmen.
- MSDS related to all the chemicals used in IFFCO Kalol complex are available
- Explosive concentration checking near the flanges.
- Fire resistant construction for all reaction vessels.
- Flame Retardant Low Smoke (FRLS) Cables are installed for electrical network.
- All the electrical fittings are provided with fuses, relays, circuit breakers.
- Management level Visual Inspection committee which quarterly carries out Hazardous Installation Inspection at these places.
- Various internal and external safety audits, Plant Safety committee, Housekeeping committees formed which conduct their audits regarding OS & H and demand time bund compliance.
- Hazardous areas already barricaded and separated from other operating units by proper separation distances. In such area, all equipment's used are flameproof and intrinsically safe.
- Plant Safety Inspections
- Hazard communication by the means of Safety Bulletin, Safety Posters, Caution boards.
- Chemicals are stored at isolated storage facility and labelling also done for identification of the container/chemicals.
- On-site emergency plan
- Mock drills
- Various PPES, Fire extinguishers, safety showers, First aid boxes (filled) & on line air masks, Gas masks etc are provided at various Hazardous installations

#### **II.** Fire Protection Measures

- Full Fledged Fire & Safety department with professionally qualified, experienced & skilled staff
- Under Ground fire Hydrant system all over the plant as well as water and foam monitor system in crucial areas.
- Installation of DCS for effective F&S Control Room operation.
- Fire extinguishers of different types provided all over the plant areas and buildings at strategic locations.
- Fire Hydrant & Riser system with Hose boxes for empty bag storage areas.
- FM-200 Local application system for the protection of Server room.
- Modular type Halotron fire extinguishers & NOVAC Based Automatic Fire Suppression system & Smoke detection system has been installed at Plant telephone exchange.
- NOVAC Based Automatic Fire Suppression system & Smoke detection system has been installed at Server room of IT Services.
- Analog addressable fire detection system at various plant control rooms, Electrical MCC's and buildings.
- Manual call points at strategic locations all over the plant premises.
- Various Fire & Safety Appliances like Foam Tenders, Fire Jeep, Water Jet Monitors, Foam Monitors, Fire Pumps (Elect.) Fire Pumps (Diesel), Jockey Pumps and Air Compressors.
- Remotely operated sprinkler system for Ammonia loading pumps, Ammonia loading gantry (rail & road) at storage area, ammonia & carbamet pumps in Urea plant.
- Water curtain system along the stairs of Urea prill tower.
- Clean agent fire extinguishers for office building areas.
- State of art beam detection system has been installed at Urea empty bag Storage area in Bagging Plant.

#### III. Safety Training

IFFCO Kalol unit is having a DISH (Directorate of Industrial Safety & Healthy) approved training center.

Following training programs are conducted for the Employees, contract workmen, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee

- Induction training: For newly joined IFFCO employee, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee
- **Induction training:** For contract workmen by F&S Department.
- **Job specific training:** Toolbox talk related to specific job like welding, cutting, grinding, vessel entry, work at height, excavation, handling hazardous chemicals etc.
- **Refresher training:** In the month of January for employees as well as contract employees, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee.
- Community awareness: To nearby villagers, school students at regular interval
- Employees are sponsored for SHE training programs at various reputed institutions.
- Regular drills and training are conducted for F&S staff at Fire station.

1. - To create safety awareness & consciousness, regular training and re-training / refresher programmes are conducted for employees and contractor's workmen.









- Training on use of Fire & Safety Equipments was given to all the control room staffs and administration building employees and contract workmen.





- Refresher training on use of Fire & Safety Equipments given to all Contract Staffs.







- Chemical Safety Training was given to all the staffs of Nano fertiliser plant and NBRC.







NOVAC Based Automatic Fire Suppression system, Smoke detection system & FM
 200 flooding system has been installed at Plant telephone exchange.











3. Wireless Smoke detection and fire alarm system has been installed at Narmada Water Treatment Plant.





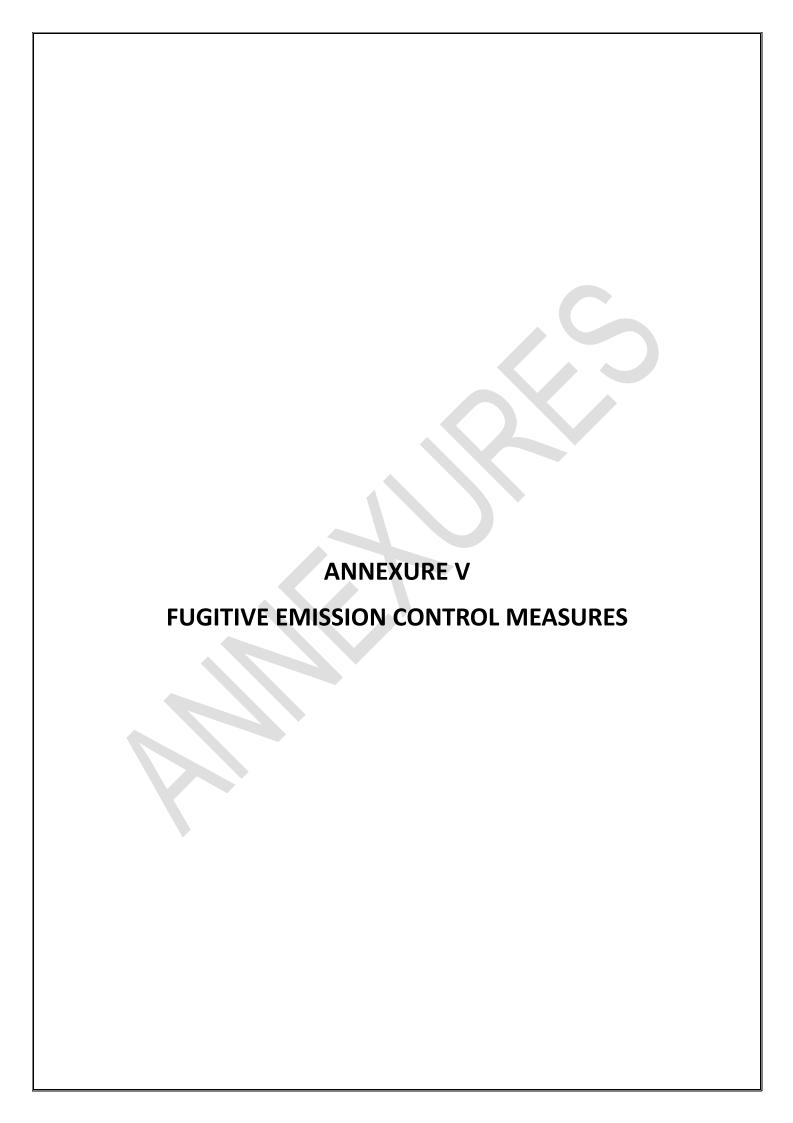


4. CO<sub>2</sub> Flooding system has been provided for Fire protection of Electric panel at NFP.



- 5. Analog addressable fire detection system has been installed at various plant control rooms (Amm. Storage, IG Plant, Cooling tower, DM Plant), Training Centre building & Cable trench in MCC Buildings.
- 6. SOPs related to Fire & Safety equipments have been revised.
- 7. Training module for contract workmen, GETs, GEAs, Apprentices has been revised.
- 8. Various safety promotional activities done during safety week celebration (51st National Safety week from 26.02.2022 to 04.03.2022) like;
  - 1. Safety Poster competition for the children (dependent of Employees)
  - 2. Safety Slogan competition.
  - 3. Best near miss award
- 10. Installation of Ammonia gas detectors at Ammonia, Urea pant and Ammonia storage area.







#### **Measures for Fugitive Emission Control**

Annexure - V

Fugitive emissions are generated more specially while transporting and handling product. Following measures are adopted in the plant to reduce the fugitive emissions.

#### Vibro Priller in Urea Plant

Vibro Priller which was developed by Chem seals Engineering, Mumbai / RPF "Grace Engineering", Ukrain, has been installed and taken in line to improve product quality, w.r.t. uniform product size distribution and to reduce PM emission level..

The Vibro Priller is designed to reduce the product temperature by uniform distribution over cross-sectional area of prill tower and also avoid deposition on prill tower inside wall. The technical advantages are uniform product size, reduced temperature of product at bottom of prill tower, improved crushing strength and reduction in dust emission from prill tower. New type of vibrator based on magnetostriction principles has been developed (a property of ferromagnetic materials that causes them to change their shape or dimensions during the process of magnetization). A control unit is provided which has the ability to control the vibration in automatic mode depending on the changing melt level.

Benefits from the Vibro priller in Urea plant is mentioned below

- > Uniform prill size is achieved
- ➤ Reduction in the temperature of urea prill in the range of 10 to 15 °C at bottom of prill tower with the same air flow.
- Crushing strength has improved compared the previous bucket (around 23 kg/cm2)
- Prill tower emission has reduced from 130 mg/Nm3 to less than 100 mg/Nm³
- > Frequency of prilling section shut down has reduced due to less scrapper build up
- No deposition of dust has been observed inside the wall of prill tower
- Prill cooling system load has reduced
- Dust dissolving batches has been reduced by 30 to 40%
- Quantum of less than 1 mm particle size is less than 1%.

#### Installation of Ammonia Scrubber (V-1207) to scrub vent scrubber (V-1203) off gases

To recover ammonia and to bring down the concentration of ammonia in vent gases within the limits specified by GPCB, one additional scrubber using DM water as scrubbing media has been installed at the downstream of vent scrubber (V-1203) to scrub gases from vent scrubber. About 2 t/h DM water is used for scrubbing. Now the vent gases from the scrubber contains less than 100 ppm ammonia. The scrubber is of 0.4 meter diameter and located above prill tower. Existing valve PICV-1202 has been shifted to downstream of the scrubber, which maintains pressure of the scrubber at around 6 kg/cm2g. A new HICV has been provided in the place of existing PICV- 1202. This valve is to be operated during plant upsets to avoid any liquid carryover to the scrubber.



#### Dust Collection system in Urea Storage Silo

Urea prills from prill cooling system is sent to bagging plant via silo/transfer tower. During this transition, dust is generated in the silo due to urea prills free falling, reclaiming, transfer of urea prills from one conveyor to another conveyor etc. In order to provide cleaner environment, wet scrubbing system including air ducting, venturi scrubber, volume separator, exhaust air fan, urea solution tank, pumps along with associated piping and instrument for the silo/transfer tower area has been installed.

#### Dust Collection system in B & MH plant

Urea prills from Prill cooling System/Silo is sent to bagging plant for bagging of urea prills. During the transition of urea prills, dust is generated in B & MH Plant at various points such as hoppers, conveyors and Bagging machines. In order to provide clear environment, a improved dust extraction system including cyclone scrubber, dedusting fan, ducting, stack, urea solution tanks, pumps along with piping and instrumentation was installed in B & MH Plant. The new improved Dust Extraction System is operated for clear environment in B & MH Plant. Photographs showing same are given in **Figure 1**.

#### Ammonia Recovery Unit in Ammonia Plant

Ammonia Recovery Unit (ARU) is installed and commissioned to treat ammonical water effluent from wash section of purge gas plant (PGR) and process condensate stripper of ammonia plant. The ammonical effluent (4%) from PGR was earlier used in regeneration of resins in water treatment plant. Now 4% caustic solution is used for regeneration of resins in WTP. The ARU consist of distillation column with provision of steam stripping for lean ammonical solution. About 3.5 MT/ day of ammonia is being recovered and the effluent water is used as Cooling tower make-up.

#### MP Process Condensate Stripper (1104-E, 1170-C A/B, 1170-J/JA) in Ammonia plant

Earlier, process condensate was treated in LP process condensate stripper (104-E) and about 6 MT/hr vapours, containing CO2, methanol and ammonia, were vented to atmosphere.

As a part of resource and energy conservation, New MP Process Condensate Stripper (1104-E) has been installed with feed pumps (1170-J A/B) and Feed/Effluent exchangers (1170-C A/B) in place of LP process condensate stripper (104-E) and associated system (170-J/JA, 170-C/171-C) during 2016-17. Now, there is no venting of Off gases to atmosphere and the off gases containing ammonia is recycled back to the system.

#### Other measures adopted in the Plant

- Preventive measures like SOPs, Work Permit System, and Physical inspection / Monitoring of equipment are taken to eliminate the chance of accident on account of explosion, spillages, fire or hazardous substances etc.
- > The finished product is being transported through Rail and trucks. The rail yard exists within the plant for transportation of finished product.
- Compressors are provided at Ammonia Storage tank to maintain tanks pressure by converting vapor Ammonia to Liquid Ammonia and then returning into Tanks.



- Ammonia gas detectors are installed at identified locations near Ammonia storage Tanks.
- Automatic weighing and Bagging machine are provided with system to reduce fugitive emission.
- Any Spillage/emission of Urea dust during different activities of urea handling/ manufacturing process is being collected & treated in de-dusting system and recirculated within the process after making urea solution.
- > All trucks with urea bags are transported after proper covering from the top.
- Bag Filters and ID fans are provided for collecting fugitive emissions for recycle into process
- De-dusting system is provided at the railway yard to collect fugitive emission of urea.
- Breather Valves are used in the ammonia storage tanks.
- Proper maintenance & operation for leak proof condition of machineries are carried out on regular basis.
- Sensors and detectors are provided at strategic locations for early detection of any leak.
- Fire hydrant system is provided as per defined guidelines to fight any emergency.
- Airborne dust at all transfers operations/ points are controlled either by spraying water or providing enclosures.
- Regular maintenance of valves, pumps and other equipment are being done to prevent leakages and thus minimizing the fugitive emissions.
- ➤ Entire process is carried out in the closed loop with proper maintenance of pressure and temperature.
- Periodic monitoring of work area is being carried out to check the fugitive emission.
- ➤ To eliminate chances of leakages from glands of pumps, mechanical seals are provided at all ammonia pumps.
- ➤ Good housekeeping, proper maintenance and continuous monitoring & inspection will prevent the chances of any fugitive emission from the process plant.

When monitoring results, indicate parameters above permissible limit, necessary corrective action is carried out immediately.





Dust Extraction System in Bagging & Product Handling Unit

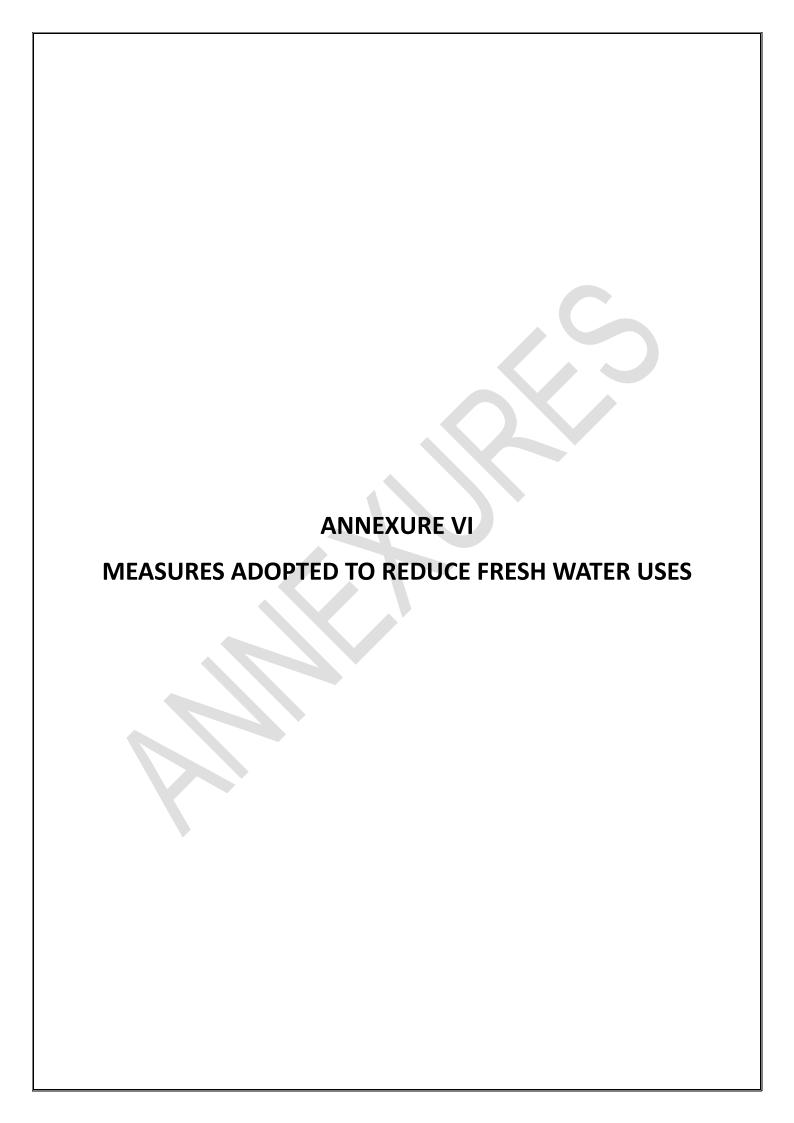


**Urea Prill Tower with Vibro Priller** 



**Dust Extraction System in Silo (Urea Storage Area)** 

Figure 1: Photographs of Dust Extraction System and Urea Prill Tower

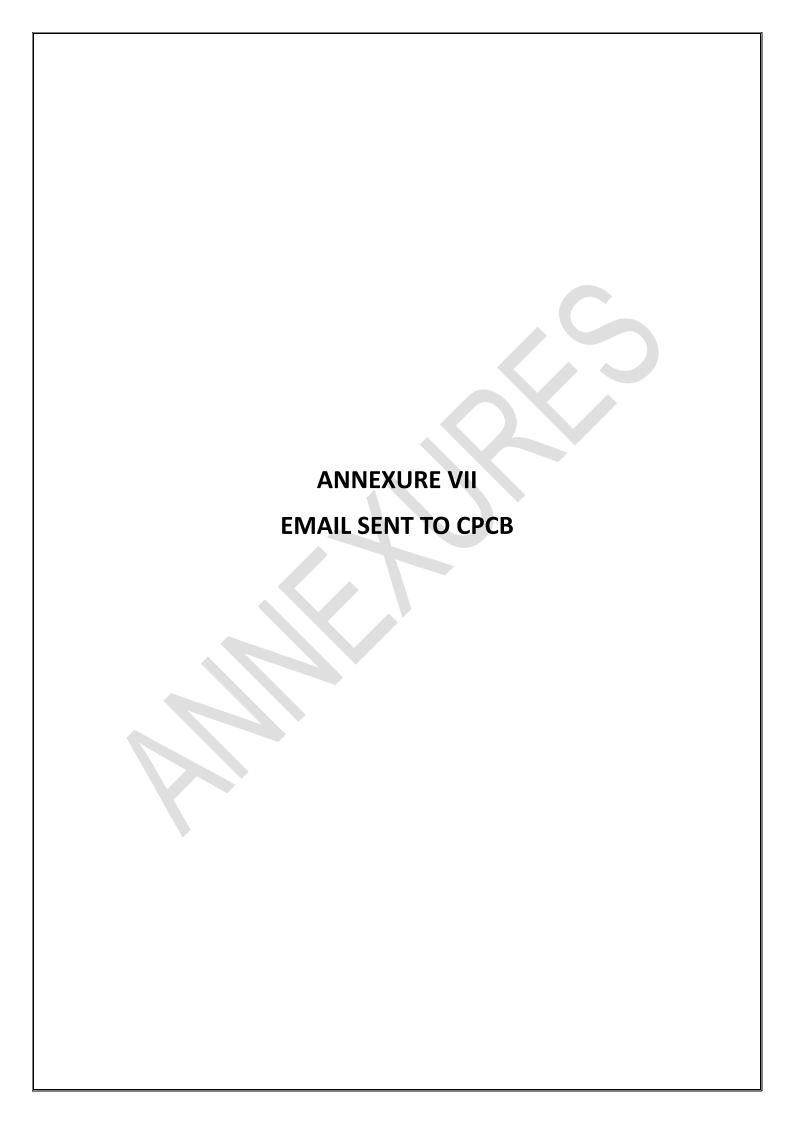




# Major pollution abatement measures implemented for recycling and reusing of treated water and optimum utilisation of Raw/Fresh water

Sr. No.	Plant	Effluent Generated	Pollution Control Device	Method of Control					
1.	Ammonia Plant	Process Condensate	Process Condensate Stripper in Ammonia plant	Process condensate from ammonia plant is stripped in MP Process condensate stripper to remove and recycle the dissolved impurities like methanol, ammonia and CO <sub>2</sub> . The stripped process condensate is reused as boiler feed water after passing through polisher unit.					
		Ammonical water from purge gas recovery (PGR) Unit	Ammonia Recovery Unit in Ammonia Plant	To treat ammonical water effluent from purge gas unit (PGR) in Ammonia plant, Ammonia Recovery Unit (ARU) has been installed. The system consist of distillation column with provision of steam stripping for lean ammonical solution. About 3.5 MT/ day of ammonia is being recovered and the effluent water is reused as Cooling tower make-up.					
		Condensate from steam condensers.	Condensate Polisher Unit	Steam condensate from ammonia plant having traces of dissolved impurities are passed through Condensate Polisher Unit and then reused as boiler feed water.					
		Condensate from Air compressor inter coolers	Reused as cooling tower make up	The pure condensate from all the three inter-stage coolers of air compressor is collected and sent to jacket cooling water sump. Finally, it is reused as cooling tower make up water.					
		Ammonical water from inter stage separator of syn gas compressor	Ammonia recovery unit / Hydrolyser stripper unit	Ammonical water from inter-stage separator of Syn Gas compressor is collected and sent to ammonia recovery unit / hydrolyser stripper unit and then reused as cooling tower make.					
		Continous blow down from steam drum.	Reused as cooling tower make up.	Blow down from steam drum is used for heating tail gas and then finally reused as cooling tower make up.					

Sr. No.	Plant	Effluent Generated	Pollution Control Device	Method of Control
2.	Urea Plant	Process Condensate	Hydrolyser System	Process condensate from Urea plant contain 5.5 to 6.5% of Ammonia and 3.0% of Urea. It is treated in Urea Hydrolyser System, where urea is decomposed to Ammonia and Carbon Dioxide. The recovered ammonia and carbon dioxide is condensed in reflux condenser for use in process. The condensate is sent to cooling tower to use as cooling tower make up water.
		Turbine Condensate	Reused as boiler feed water	The surface condensate from CO <sub>2</sub> Compressor turbine is sent directly to deaerator after heating to 96°C in surface condenser heater for <b>use as boiler feed water.</b>
		Steam Condensate	Reused as boiler feed water	First stage evaporator steam condensate, is sent directly to deaerator in steam generation plant All other steam condensate is collected in the atmospheric condensate tank and the condensate is used as make-up to steam drum in urea plant and balance quantity is transferred to steam generation plant (BHEL boiler).
		Condensate from inter- stage coolers of CO <sub>2</sub> compressor	Reused as cooling tower make up water	A condensate outlet from inter-stage separators is connected to CO <sub>2</sub> spray cooler sump and from there it is pumped to use as cooling tower make up.
3.	Steam generation plant	Continuous blow down	Reused as cooling tower make up	Blow down from steam generation plant is used as cooling tower make up.
		Steam Condensate	Reused as boiler feed water	First and second stage evaporators steam condensate, is sent directly to deaerator in steam generation plant All other steam condensate is collected in the atmospheric condensate tank and the condensate is used as make-up to steam drum in urea plant and balance quantity is transferred to steam generation plant (BHEL boiler).





#### INDIAN FARMERS FERTILISER COOPERATIVE LIMITED KALOL UNIT

Annexure - VII

Date: 21.7.2018

P.O. Kasturinagar, Dist.: Gandhinagar (North Gujarat) PIN Code: 382 423 (INDIA)

EPC/02/2300

Central Pollution Control Board. IT Division, 5th Floor PariveshBhavan East Arjun Nagar, Delhi 110032.

Kind Attn: Sri. Aditya Sharma, Scientist D, IT Division.

Sub: To check tampering of online continuous emission monitoring system (OCEMS) data through Remote calibration for emission parameters.

Ref:1) Direction received from the CPCB vide notice No 12011/33/2018/IT-RCAL dtd 25.6.2018

2) GPCB letter No GPCB/CCA-GNR-95(7)ID-16444, vide Outward No 459247 dtd 26.6.2018

Dear Sir.

With reference to above, our observations / action taken are as under:

Trial runs of PM analyzer (Make: Durag) which was installed at ID fan stack of urea prill tower were not successful. It was communicated to the supplier M/s Adage Automation, Mumbai. In response to it, Representative from Adage Automation visited site and removed the unit from prill tower ID Fan on 15.2.2018. This has already been communicated to CPCB vide our E-Mail msg dtd 2.7.2018 under the subject "OCEMS Compliance reporting protocol: IFFCO: Kalol Unit", copy of which is attached herewith as Annexure - I

In view of above, compliance of following points as mentioned in above referred GPCB letter (copy attached as Annexure -II) is not applicable for IFFCO - Kalol Unit.

A. Calibration facility for OCEMS is available at the Industry.

B. Instruments are periodically calibrated and calibration data is also entered automatically into the system through the software installed at industry.

C. Remote calibration facility is available at each gaseous OCEMS

This is for your kind information please.

Thanking you.

Gujarat Pollution Control Board

Head Office BONICE NO. 10-14, Gandhmagar-382010

Encl: as above

cc: (1) Mrs. Dipali Tank, Unit Head- Gandhinagar, GPCB, Gandhinagar

(2) Mr. D C Vankani, Regional Officer, GPCB, Gandhinagar

Phone: 079-23282005, 02764-223256, 223258

Fax : 079-23286020

Yours faithfully. For IFFCO Kalol Unit

General Manager

Email: dginamdar@iffco.in Web Site Address: www.iffco. in



aditya.cpcb@nic.in, cems.cpcb@nic.in,

opdayama/kalol/iffco@iffco, epckalol/kalol/iffco@iffco,

cc. smohan/kalol/iffco,

Subject: Revised Mail on OCEMS Compliance reporting protocol - IFFCO : Kalol Unit

From: smohan/kalol/iffco - Monday 07/02/2018 11:46 AM

#### Dear Sir,

This is with reference to the telephonic talk which I had with you on 28.6.2018 regarding subject matter.

In this context, required data / information under OCEMS - Compliance reporting protocol for IFFCO-Kalol Unit have already been submitted online in CPCB Website.

Copy of acknowledgement slip is attached herewith for your reference.



OCEMS - Compliance reporting protocol - Acknowledgement slip.docx

Following are the Revised deviations / observations.

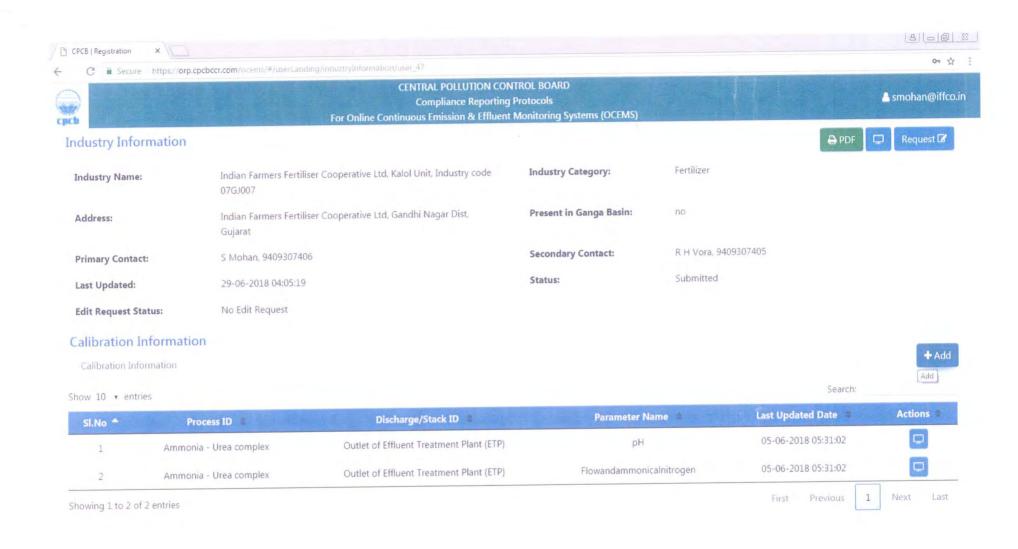
- 1) In the protocol, ETP online continuous monitoring parameters such as Flow and ammonical nitrogen have been combined together. Hence there is no provision for mentioning characteristics of flow meters and ammonia analyser separately.
- The system was not accepting industry code of IFFCO Kalol unit i.e 07GJ007. Hence same has been mentioned alongwith industry name.
- 3) PM Analyser (Make: Durag) was supplied and installed at Prill tower ID fan by M/s. Adage Automation, Mumbai on trial basis. But the trial runs were not successful. Same was communicated to the supplier. Accordingly representative from M/s Adage Automation visited site and removed the unit from prill tower ID fan on 15.2.2018

As per your advise, above points have been highlighted in the space meant for deviations / observations ( Ref : Clause No 23 of Part III, Section H ) of the protocol.

This is for your information please.

Regards,

S. Mohan
Dy. GM (Env & Pollution Control)
IFFCO Kalol Unit
Ph.: +91-9409307406 (M)
: 079-23282029 (O)























### GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar 382 010

Phone: (079) 23222425

(079) 23232152

Fax: (079) 23232156

Website: www.gpcb.gov.in

R.P.A.D.

GPCB/CCA-GNR-95(7)/ID- 16444/

/date:

To

M/s Indian Farmers Fertiliser Co-Operative Limited.

P.O.Kasturinagar, Dist-Gandhinagar,

Sub: To check tampering of online continuous emission monitoring system(OCEMS) data through Remote calibration for emission parameters.

Ref: Direction received from the Central Pollution Control Board(CPCB) vide letter No-C-1200/33/2017-2018/Tech/522 dated 16/04/2018.

Sir.

With respect to the above subject, the above referred CPCB letter dated 16/04/2018. Is enclosed here with for ready reference. You are hereby directed under Section 31 – (A) of the Air Act' 1981 to comply with following directions.

- A) Calibration facility for OCEMS is available at the industry end.
- B) Instruments are periodically calibrated & calibration data is also entered automatically into the system through the software installed at industry.
- C) Remote calibration facility is available at each gaseous OCEMS.

As directed remote calibration facility should be mandatory & should made available at industry on or before 31/05/2018.

You are hereby directed to submit above each point compliance report to office of CPCB with copy to this office.

This letter is issued after approval from competent authority.

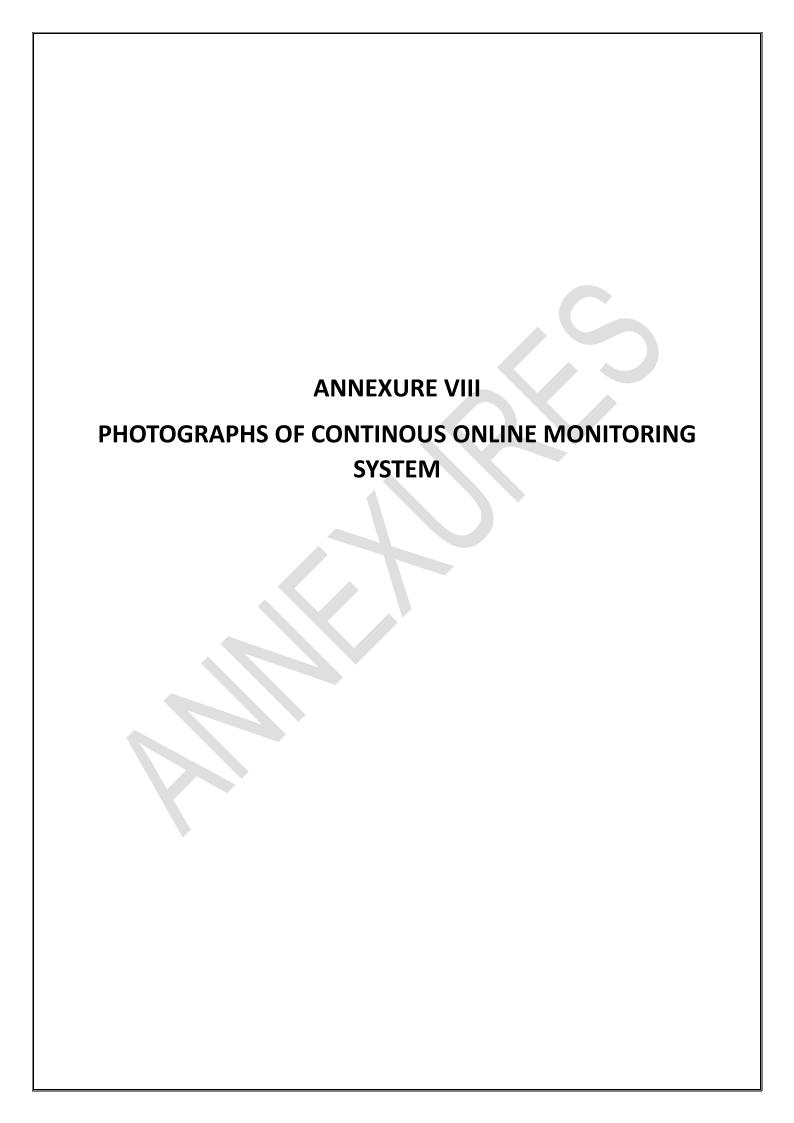
Thanking You.

For & on behalf of Gujarat Pollution Control Board

(i, J.

( Dipali Tank ) Unit Head

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

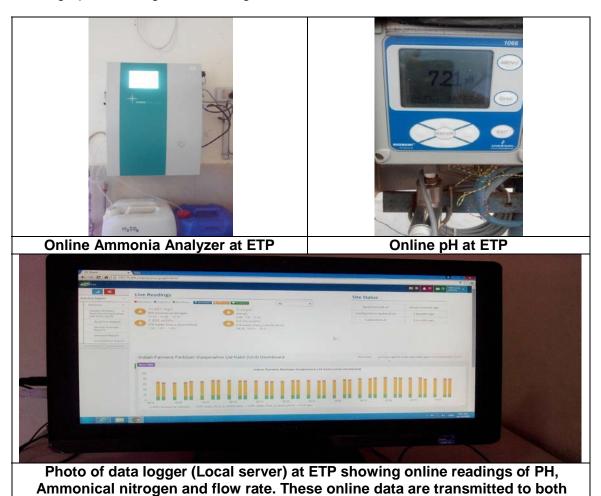




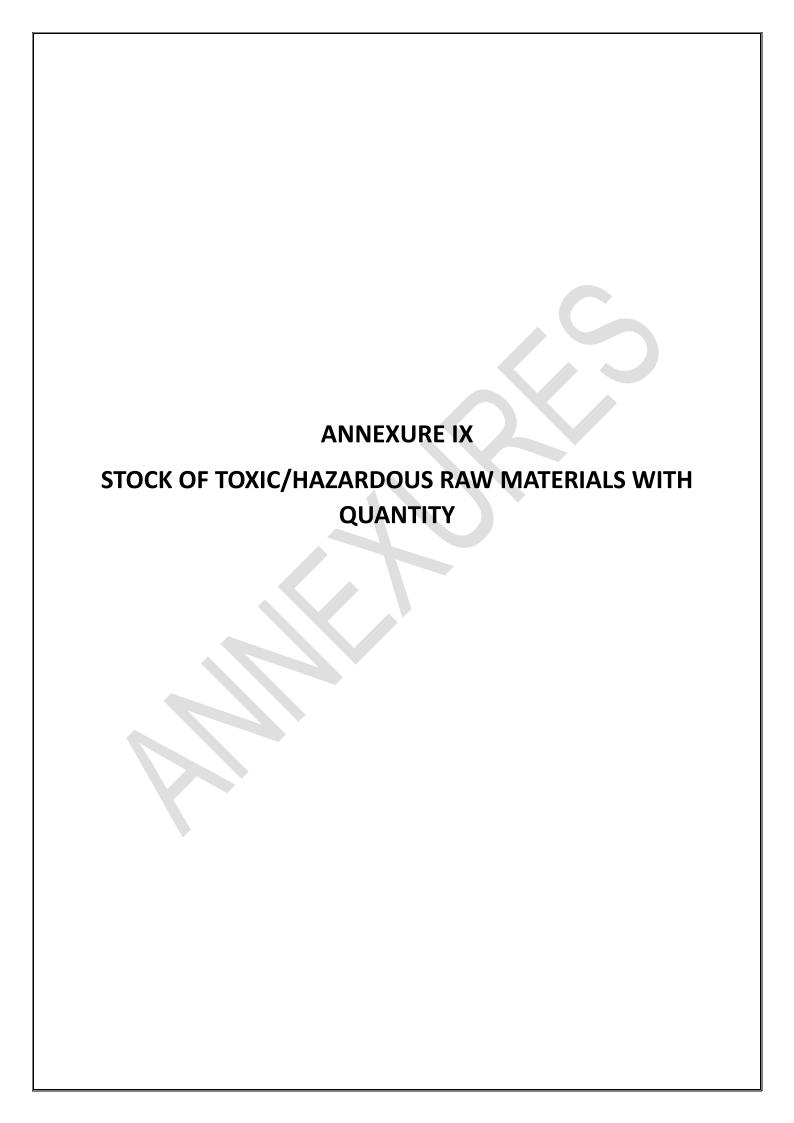


#### Online Continuous Effluent Monitoring Systems (OCEMS)

Online instruments / analyzer for measurement of pH, Flow and ammonical nitrogen at the outlet of Effluent Treatment Plant (ETP) have been installed. Online data is captured in data logger and connectivity has also been established with both GPCB & CPCB Servers. Photographs showing the same is given below



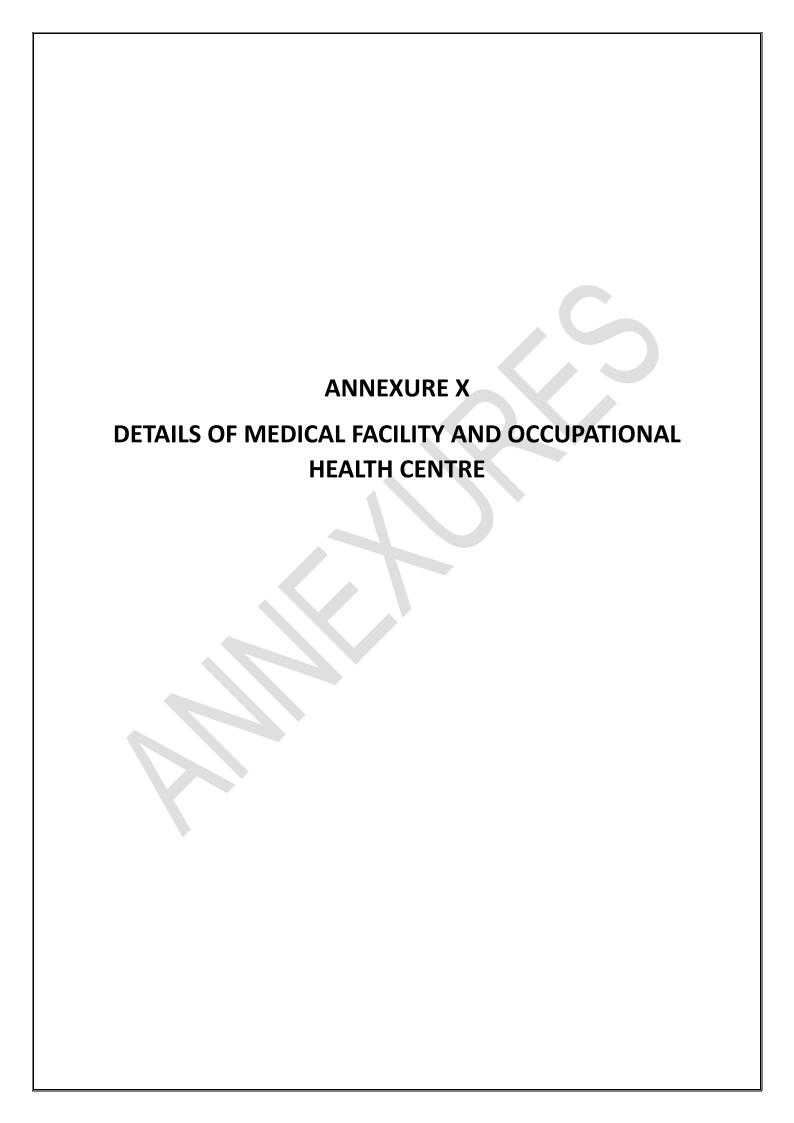
**CPCB & GPCB servers** 





## Details of stock of toxic/hazardous raw material with quantity in the IFFCO Kalol Unit

Sr. No.	Toxic/Hazardous Raw material	Usage	Mode of Transportation	No. of Storage Tanks	Storage Capacity	Type of Storage	Closing Stock as on 30.09.2023
1	RLNG	Raw material for Ammonia plant	Through pipeline from GSPC		-	45 Kg/cm2 Temp: 22-25 deg C: Continuous gas supply	Nil
2	Ammonia	Raw material for Urea plant	Through Pipeline from Ammonia plant to Urea	2	5000 MT + 10000		2733 MT
3	Carbo n Dioxide	Raw material for Urea plant	Through Pipeline from Ammonia plant to Urea				Nil
4	Hydro - Chloric Acid	For regeneration of Resins for Water	By Road Tanker of 12 MT	2	2 x160 MT	FRP tanks at NTP Conditions	238 MT
5	Sodium Hydroxide	For regeneratio n of lon exchange Resin in Water treatment & to maintain	By Road Tanker of 12 MT	3	29.5 KL+ 50 KL+ 9. 5 KL	MS rubber lined tanks at NTP Conditions	39 MT
6	Sulphuric Acid	To maintain Cooling Water pH in Cooling	By Road Tanker of 12 MT	3	33 MT + 20 MT + 5 MT	MS rubber lined tanks at NTP Conditions	30 MT
7	Chlorine	For prevention of microbiological growth in water in Cooling Tower	By Road in tonner of 1 MT	Stored in Tonners			7 MT





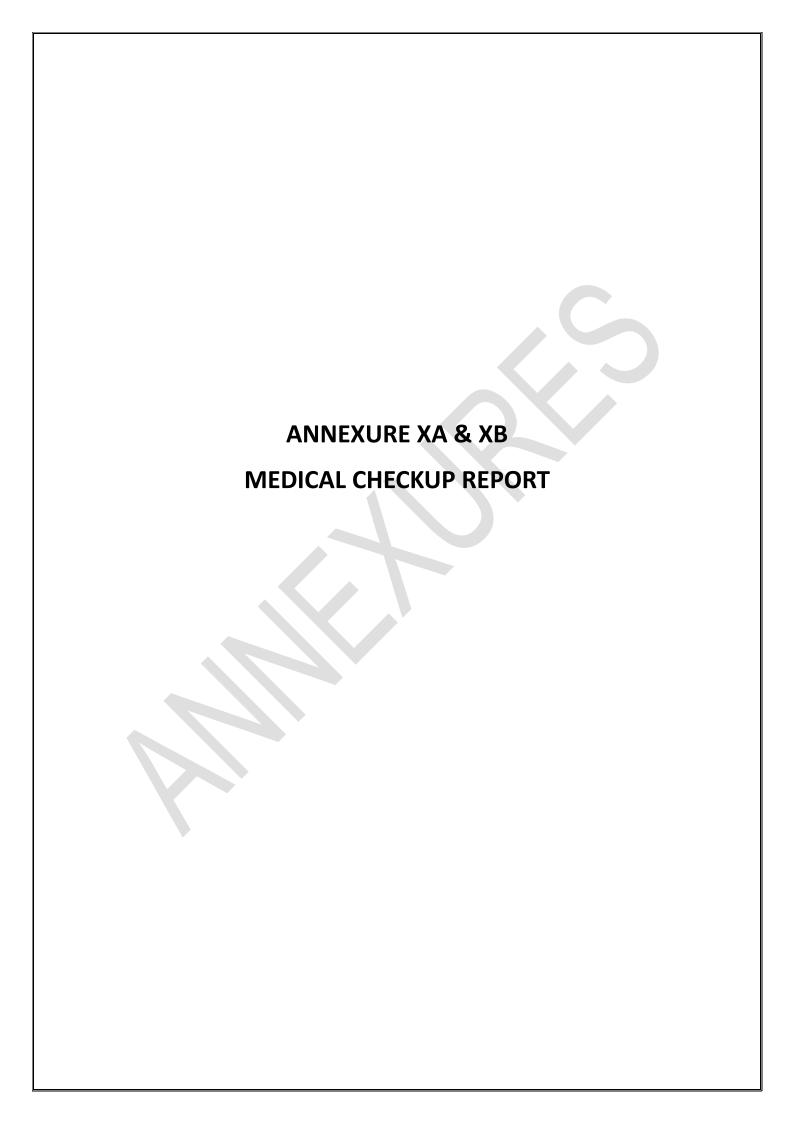
#### Annexure - X

#### Details of Medical Facilities at Occupational Health Centre (OHC) at IFFCO Kalol

- 1) Availability of staff at OHC:
  - One Pharmacist / Staff nurse round the clock on OHC in shift duty.
  - One Ambulance driver with well-equipped Ambulance.
  - One doctor is available in OPD hours and on call basis in remaining time.
  - One Safai Karmachari (Cleaner) is available in from 6 am to 10 pm as per their shift schedule.

#### 2) Medical facilities at OHC:

- 2 (Two) Beds for first aid and daycare for emergency patient
- · Oxygen Cylinder
- Oxygen Generator
- Defrillator for Cardiac Arrest patient
- Nebulizer for Asthmatic Patient
- ECG Machine
- Pulmonary Function Test Machine
- Suction Machine
- · Breath Analyzer for Alcoholic patients
- Mercury free BP Apparatus
- · Infrared Thermometer
- Sterilizer and Autoclave for Disinfection of Instruments
- Ultra Violet (UV) Chamber for disinfection of instruments
- One Auto loaded Stretcher for fast movement of patient
- One Eye Shower and Overhead Shower in front of OHC
- Color coded buckets for Bio Medical Waste Segregation as per GPCB guidelines
- · Emergency Medicines
- · OTC Medicines for OPD usage.



#### **HEALTH REGISTER FOR WORKERS OF HAZARDOUS AREA**

2023-II Type of Employment Unit Kalol Period **EMPLOYEE** 

1. Serial number in the register of the audit workers 110149

2. Name of worker SAMRAT S DARBAR

3. Designation Optr(Urea) Gr I

4. Sex MALE

5. Age (in years) 37:3

Dept	Name of Hazard ous Proces s	Dangerou s Process/ Operation	occupation	Raw products/ byproducts	Date of Postin g	Date of Transfer	Reas on for Trans fer	Date of Medical Examination	Signs and Symptoms Observed During Examination	Nature of result	Resul t Fit or Unfit	Period of tempor ary withdra wal from work	wal	Date of declaring fit/ unfit	Date of issuing fitness certi.	Sign of factory medical officer
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
UREA	Working Hazard	g in ous area	Optr(Urea) Gr I	AMMONIA , CONC.SU LPHURIC ACID, PHOSPHO RIC ACID, UREA, FILLER, DUST.				14/09/2023	P.R 86/min B.P 136/80mm Hg R.R 21/min CHEST- Normal CVS- Normal CNS- Normal LIVER/ SPLEEN- NOT PALPABLE TEMPERATURE- AFEBRILE CYANOSIS- NOT PRESENT PALLOR- NOT PRESENT CLUBBING- NOT PRESENT AUDIOMETRY- Within Normal Limits SPIROMETRY- Within Normal Limits REMARKS-	NORMAL	FIT	Not Applic able	Not Applic able	14/09/2023	14/09/2023	DR. SAMYAK SOHAMB HAI LAKHIA

Note - 1. Seperate page should be maintained for individual worker. 2. Fresh entry should be made for each examination.

#### Form no - 32 Prescribed under rule 68 - T and 102

#### **HEALTH REGISTER FOR WORKERS OF HAZARDOUS AREA**

Period 2023-II Type of Employment Unit Kandla W

1. Serial number in the register of the audit workers 15

Ashwinji Thakor 2. Name of worker

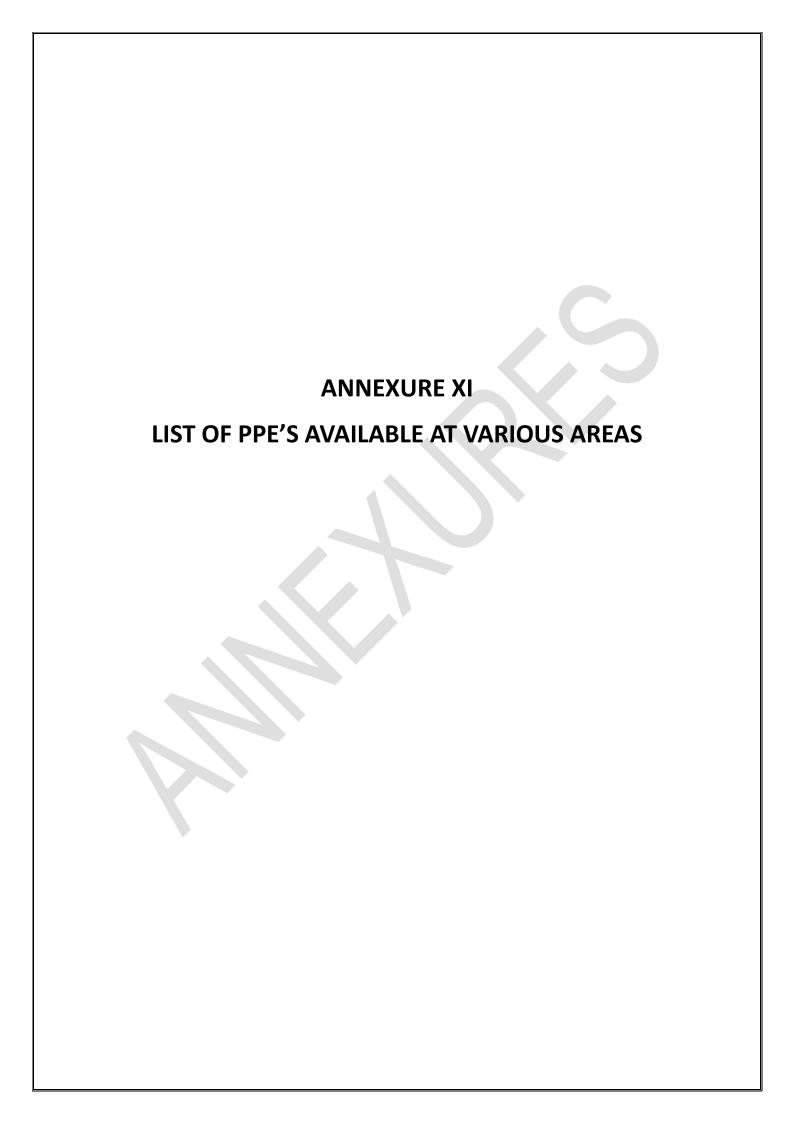
3. Designation

4. Sex MALE

5. Age (in years) 36

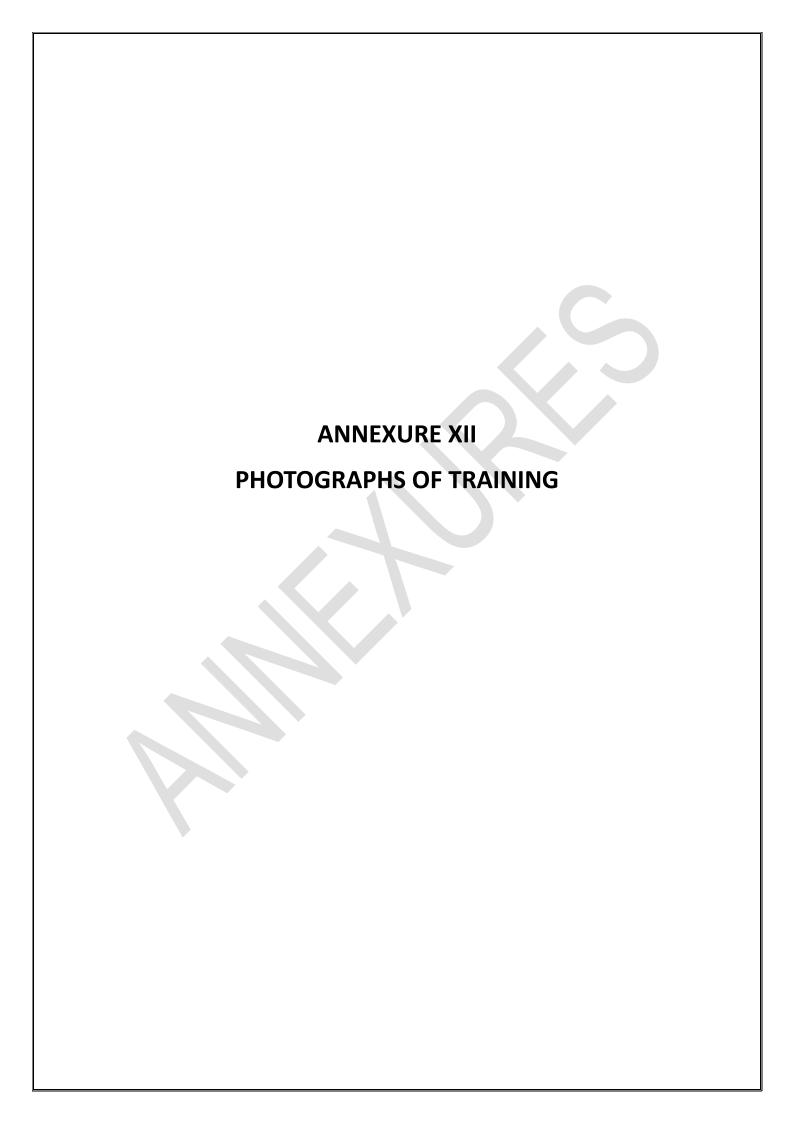
Dept	Name of Hazard ous Proces s	Dangerou s Process/ Operation	occupation	Raw products/ byproducts	Date of Postin g	Date of Transfer	Reas on for Trans fer	Date of Medical Examination	Signs and Symptoms Observed During Examination	Nature of result	Resul t Fit or Unfit	Period of tempor ary withdra wal from work	n for withdra wal	Date of declaring fit/ unfit	Date of issuing fitness certi.	Sign of factory medical officer
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PRODU CT HANDLI NG	Working hazardo of produ	us area		AMMONIA , CONC.SU LPHURIC ACID, PHOSPHO RIC ACID, UREA, FILLER, DUST.				06/07/2023	P.R 68/min B.P 128/76mm Hg R.R 18/min CHEST- Normal CVS- Normal CNS- Normal LIVER/ SPLEEN- NOT PALPABLE TEMPERATURE- AFEBRILE CYANOSIS- NOT PRESENT PALLOR- NOT PRESENT CLUBBING- NOT PRESENT AUDIOMETRY- Within Normal Limits SPIROMETRY- Within Normal Limits REMARKS-	NORMAL	FIT	Not Applic able	Not Applic able	06/07/2023	06/07/2023	DR. SAMYAK SOHAMB HAI LAKHIA

Note - 1. Seperate page should be maintained for individual worker. 2. Fresh entry should be made for each examination.



### **Details of PPE's**

Sr. No.	PPE name	Ammonia	Urea	Offsite							ELEC	LAB	Fire Tender	F & S STORE	TOTAL
				CR	NWT	ETP	Blr	СТ	DM						
1.	B. A. Set (45 min )	04	04	02	01		02						04	08	25
2.	B. A. Set (10 min )	03	03+2	02	02	01	01	01		01	01	01	08	06	32
3.	Digital Explosive Meter & Gas Detector	01	01				01							04	07
4.	Safety Belts	04	02	02 O/M	01					04	01		02	21	37
5.	Face Shield	01	02	01	01		01	01	01	01	01	01		04	15
6.	Goggles	02	02	02	02		02	01	01	02	02	02			18
7.	Acid / Alkali proof Hand Gloves	02	02	02	02		04	02	02			02	04		22
8.	PVC Hand Gloves	02	02	02	02		02					02	04		16
9.	Basofil Hand gloves	02	02	02			02	02				02	04		16
10.	Chemical protection Suits	01	01	02	01		01	01	01			01	02	11	22
11.	Aluminized Suit	01	-										02	02	05
12.	Air Line Point at field	09	37	15	01									24	86
13.	Airline Point & Mask Set for CR	03	03	03			02							14	25
14.	Safety Showers	04	05	7	01	03		02	01	01				1 <sub>Disp</sub>	25
15.	Canister Mask (Ammonia)	03	12	02				03	01					6+2	29



### Refresher F & S training is being imparted to all Employees and Contract Workmen

1.- To create safety awareness & consciousness, regular training and re-training / refresher programmes are conducted for employees and contractor's workmen.









- Training on use of Fire & Safety Equipment's was given to all the control room staffs and administration building employees and contract workmen.







- Refresher training on use of Fire & Safety Equipment's given to all Contract Staffs.





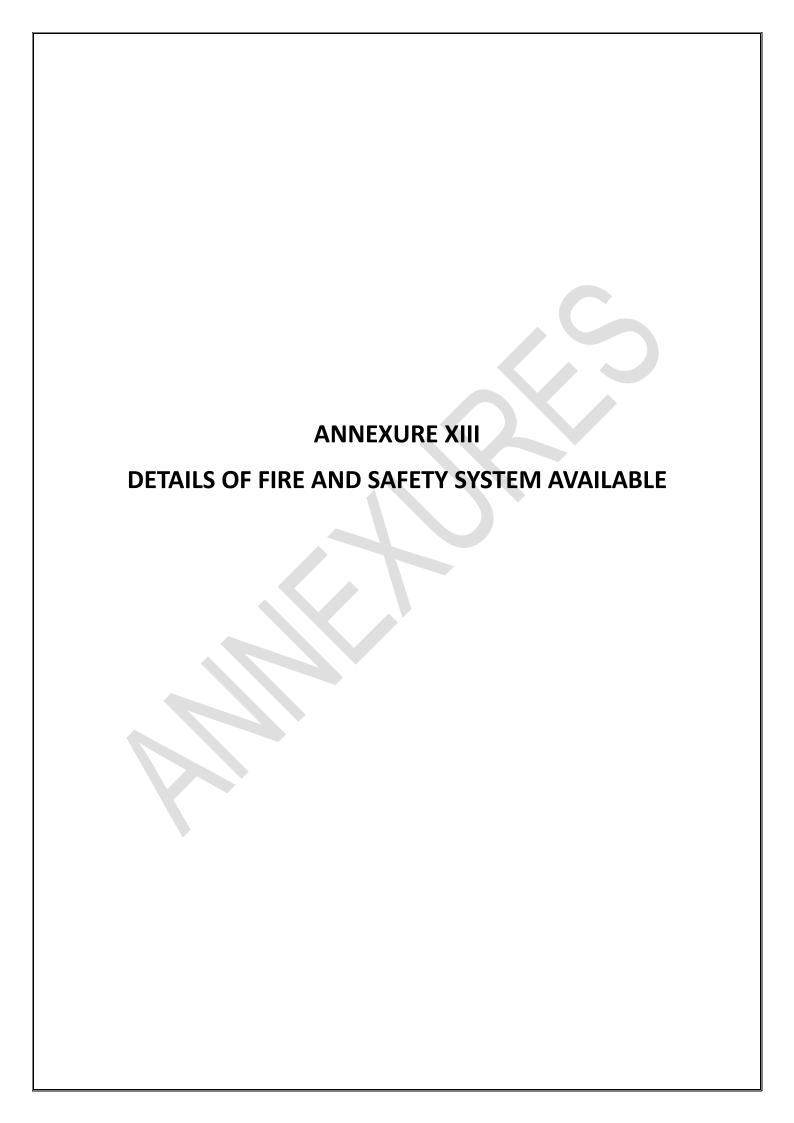


- Chemical Safety Training was given to all the staffs of Nano fertiliser plant and NBRC.











### **Details of Fire & Safety Systems**

### I. Safety Measures

- OH & S policy at corporate level and IMS policy at Unit level and said Policies of IFFCO are given in Figure 1 and Figure 2.
- Hazard Identification and Risk Assessment
- Work Permit System procedure has been established for safely execution of job.
- Lock Out and Tag Out procedure has been established for Isolation of energized equipment's/machineries.
- Standard Operating procedures.
- Start-up procedure Shut down procedure, emergency procedure.
- Inbuilt safety measures such as trips, alarms, logics.
- All the pressure vessels/pipelines are provided with Safety Relief Valves, Audio-Visual alarms, trips, Safety interlocks.
- Mechanical integrity through Preventive Maintenance for all the machineries at regular intervals.
- Safety instrumentation- DCS System for plant process monitoring.
- Insulation of all the process equipment's which are subjected to high temperature conditions.
- Worker's participation in Safety Management system:- Safety committee meetings, employee suggestion schemes.
- Incident Investigation & reporting.
- Online near miss reporting
- DISH Certified competent persons for issuing work permit to carry out jobs in confined space.
- DISH Approved training centre to impart training for all the level of employees/Contract workmen.
- MSDS related to all the chemicals used in IFFCO Kalol complex are available
- Explosive concentration checking near the flanges.
- Fire resistant construction for all reaction vessels.
- Flame Retardant Low Smoke (FRLS) Cables are installed for electrical network.
- All the electrical fittings are provided with fuses, relays, circuit breakers.
- Management level Visual Inspection committee which quarterly carries out Hazardous Installation Inspection at these places.
- Various internal and external safety audits, Plant Safety committee, House keeping committees formed which conduct their audits regarding OS & H and demand time bund compliance.



- Hazardous areas already barricaded and separated from other operating units by proper separation distances. In such area, all equipment's used are flameproof and intrinsically safe.
- Plant Safety Inspections
- Hazard communication by the means of Safety Bulletin, Safety Posters, Caution boards.
- Chemicals are stored at isolated storage facility and labelling also done for identification of the container/chemicals.
- On-site emergency plan
- Mock drills
- Various PPES, Fire extinguishers, safety showers, First aid boxes (filled) & on line air masks, Gas masks etc are provided at various Hazardous installations.

### Well equipped- Safety Exhibition for visitors and trainees

• There is a well equipped safety exhibition at F&S building. Different types of fire and safety equipment's have been displayed to make the people aware about available equipment's, facilities and their use.











### **Safety of Visitors**

- 1. IFFCO Kalol has established online system for visitors evaluation on HSE aspects before issuing them the gate pass.
- 2. We have made a safety film for visitors. The film is shown to all the visitors at Security building and then the visitors are asked to undergo an online safety quiz based on the contents displayed in safety film.
- 3. After successful completion on quiz gate pass is issued to visitors for entry inside plant premises.









### II. Fire Protection Measures

- Full Fledged Fire & Safety department with professionally qualified, experienced & skilled staff.
- Under Ground fire Hydrant system all over the plant as well as water and foam monitor system in crucial areas.
- Installation of DCS for effective F&S Control Room operation.
- Fire extinguishers of different types provided all over the plant areas and buildings at strategic locations.
- Fire Hydrant & Riser system with Hose boxes for empty bag storage areas.
- FM-200 Local application system for the protection of Server room.
- Modular type Halotron fire extinguishers & NOVAC Based Automatic Fire Suppression system & Smoke detection system has been installed at Plant telephone exchange.
- NOVAC Based Automatic Fire Suppression system & Smoke detection system has been installed at Server room of IT Services.
- Analog addressable fire detection system at various plant control rooms, Electrical MCC's and buildings.
- Manual call points at strategic locations all over the plant premises.
- Various Fire & Safety Appliances like Foam Tenders, Fire Jeep, Water Jet Monitors, Foam Monitors, Fire Pumps (Elect.) Fire Pumps (Diesel), Jockey Pumps and Air Compressors.
- Remotely operated sprinkler system for Ammonia loading pumps, Ammonia loading gantry (rail & road) at storage area, ammonia & carbamet pumps in Urea plant.
- Water curtain system along the stairs of Urea prill tower.
- Clean agent fire extinguishers for office building areas.
- State of art beam detection system has been installed at Urea empty bag Storage area in Bagging Plant.

Photographs showing some of Fire fighting and detection equipment's are as under:

### FIRE HYDRANTS AND MONITORS







### **PORTABLE MONITOR:**





### FIRE EXTINGUISHERS





### FIRE VEHICLES: Three Nos.

Sr.	Tender	Capacity		Pump Capacity	Registration No.
No				(LPM)	
		Water	Foam		
		(Litre)	(Litre)		
1	Foam Tender	3500	500	2250	GJ -18 -AX- 6736
2	Foam Tender	2500	500	1800	GJ– 18 <b>-</b> U – 8656
3	Fire Jeep	-	-	-	GJ -18 – AX – 1375





### FIRE/EMERGENCY COMMUNICATION SYSTEM:

Fire Alarm Panel Boxes (Manual Call Point): 47 Nos.





Smoke Detectors: Ammonia Control Room, Urea Control Room, Storage Control Room, Boiler Control Room, Empty Bag Storage room in B&MH Plant, Elect. MPSS, IT Services, Technical Building, Personal & Administration Building, Maintenance building, Inst. & Civil building, Training Centre, Laboratory, Cooling Tower CR, IG Plant CR, DM Plant CR and all elect. MCC. System.



Wireless smoke detection and fire alarm system has been installed at Narmada Water Treatment Plant.





Page 6 of 9



Public Announcing System

Walky Talky System

Internal Telephones (2222 Nos. Only receiving Mode, 2635 Fire Control Room Incharge)

Coded Siren with 05 Km range.

NOVAC Based Automatic Fire Suppression system & FM 200 flooding system has been installed at Plant telephone exchange.











### III. Safety Training

IFFCO Kalol unit is having a DISH (Directorate of Industrial Safety & Healthy) approved training center.

Following training programs are conducted for the Employees, contract workmen, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee

- **Induction training:** For newly joined IFFCO employee, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee
- Induction training: For contract workmen by F&S Department.
- **Job specific training:** Toolbox talk related to specific job like welding, cutting, grinding, vessel entry, work at height, excavation, handling hazardous chemicals etc.
- **Refresher training:** In the month of January for employees as well as contract employees, GETs, apprentice trainees, IFFCO Trainees and Vocational trainee.
- Community awareness: To nearby villagers, school students at regular interval
- Employees are sponsored for SHE training programs at various reputed institutions.
- Regular drills and training are conducted for F&S staff at Fire station.



IFFCO Kalol have won more than 45 Awards since 1977 from State, National and International for Safety. Also, many in-house training programmes for Environment and safety are being conducted by IFFCO.

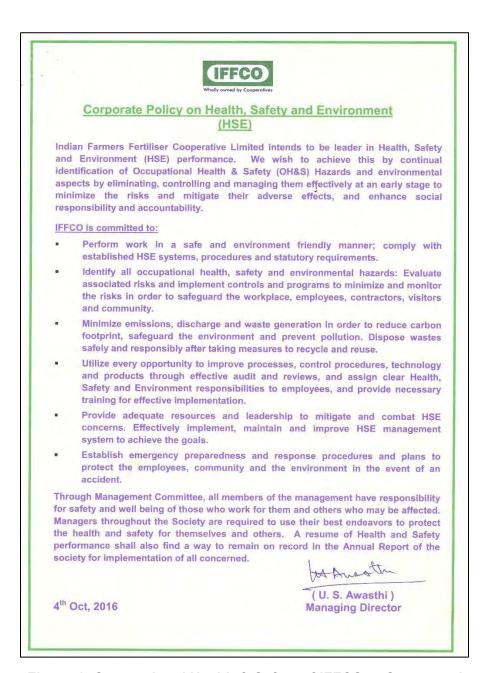
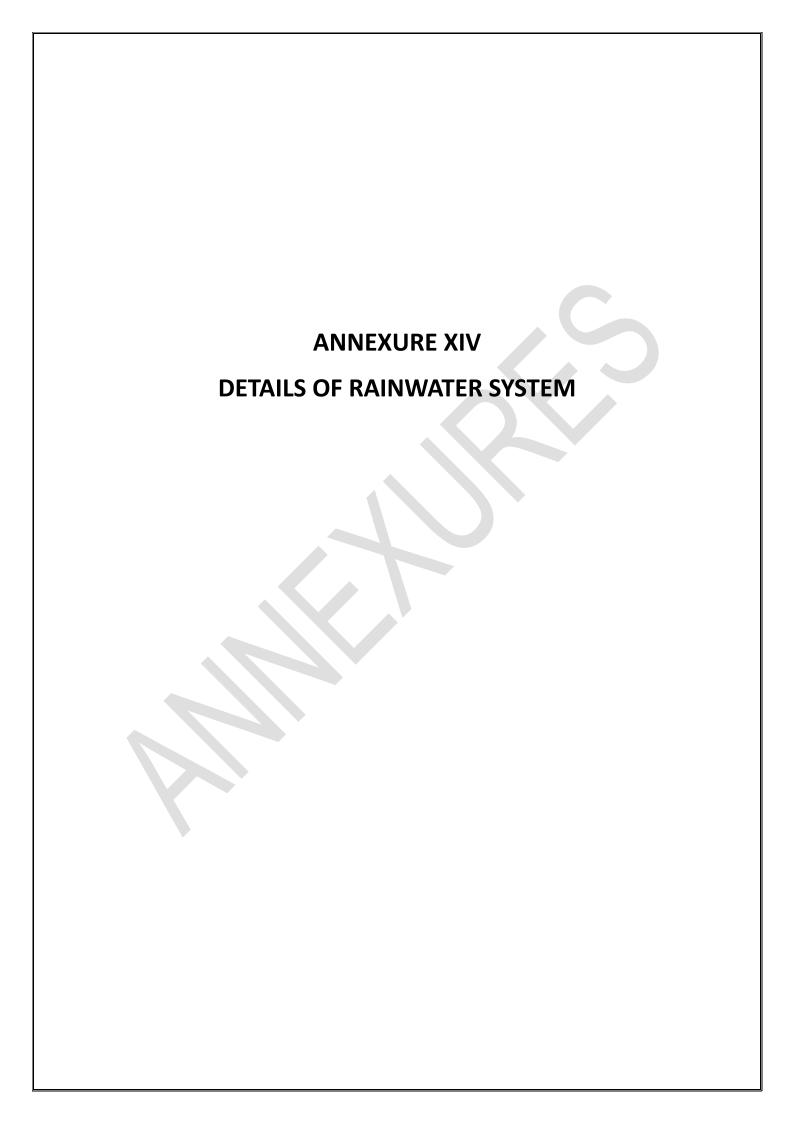


Figure 1: Occupational Health & Safety of IFFCO at Corporate Level





Figure 2: IMS Policy of IFFCO Kalol at Plant level





### **RAINWATER HARVESTING AT IFFCO - KALOL**

### Rain water harvesting at Township - Kasturinagar

### (Artificial recharge project by West Central Region(WCR), Central Ground Water Board

In collaboration with West Central Region, Central Ground Water Board(CGWB), water recharging well of 600 m<sup>3</sup> capacity was installed and commissioned on 15<sup>th</sup> August 2001 for rain water harvesting at the cost of Rs 6.85 lakhs. Almost total rainwater of Kasturinagar Township is collected in 700 m<sup>3</sup> capacity sumps and water is percolated in the soil through two tube wells provided.









Rain Water Harvesting system (Old) (36 m³/hr capacity)

Rain Water Harvesting system (New) (25 m³/hr capacity)

Apart from above, "Rain water harvesting modules" of Approx. 25 m<sup>3</sup> capacity was installed at its township for harvesting the rain water. This is a "Precast modular step well" type (Primary+Secondary) of system which operate on gravity and does not require electricity.

Primary module is for primary filtration of surface water. The water enters into the module horizontally from the surface. Top module is provided with gravel which restrict physical particles like vegetation and plastic entering the module and lower module acts as sedimentation/ settling tank.

Secondary unit have V-Wire screens of SS and a sand bed and gravels which control physical particles and natural environment impurities. The clean & pure rainwater is diverted to bore well of existing rain water harvesting system through cast iron pipe.

The system was commissioned on 15th August - 2014. Cost of implementation of the scheme was Rs. 1.6 Lakhs.

### (I) Rain water harvesting at plant area

"Rain water harvesting modules" of Approx. 25 m<sup>3</sup> capacity has been installed near Union Office at Plant site. This is a "Precast modular step well with bore well" with natural filters.

It consists of single module with internal volume of approximately 0.8 cubic meter that is to be fixed below ground level. The module is of an octagonal shape with a diameter of approximately 1000 mm below ground level and 918 mm above ground level.

The inlet and outlet of the system is 110 diameter UPVC pipes. The entire system contains approximately 0.06 cubic meter gravels of 40 mm size. Drilling depth as per geo logical condition is 60 ft.

The system was commissioned on 15<sup>th</sup> August - 2014. Cost of implementation of scheme was Rs. 2.2 Lakhs.



Module at Union office, IFFCO Kalol Plant

# (II) Rain water harvesting with Bore well (02 Nos) installed at Township (Furaat Modular Model - PMW-92CFM-P1, Cement concrete system with SS 304 screen with Natural Filters)

It consists of single module with internal volume of approximately 0.8 cubic metre that is fixed below ground level. The module is of an octagonal shape with a diameter of approximately 1000 mm below ground level and 918 mm above ground level and below the planters and the top of the planter is approximately 1240 mm diameter.

It has a total of 16 pillars of 105 mm dia x 330 mm height fixed in circular arrangement with a gap of 30 mm between each two pillars making a total horizontal inlet area of 1584 cubic centimeter. The area within the pillars, above ground level and below the planter holds the gravels of 40 mm and acts as a filter.

Total height of the system is 2178 mm alongwith four planters of 570 x 570 x 186 having volume of approximately 0.025 cubic meter of each planter.





Module installed near Sr. GM Bunglow

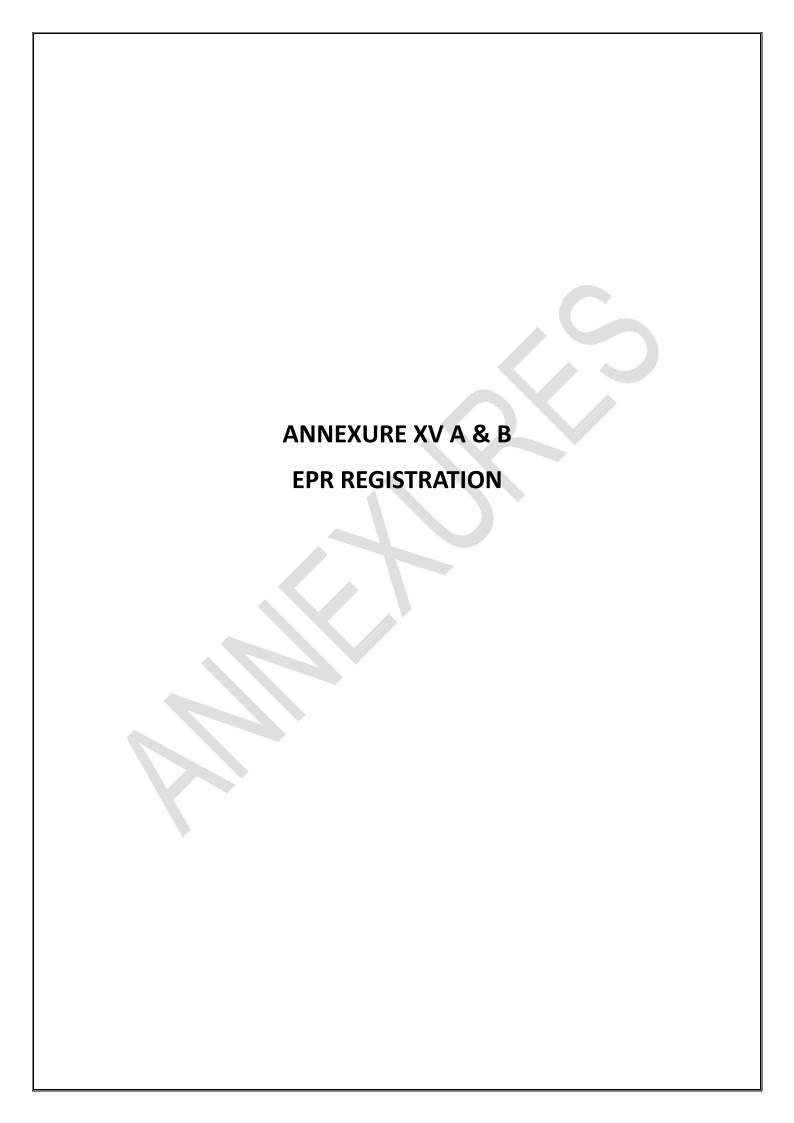
Module installed near Nehru Circle

The height of the unit below the ground level is approximately 1602 mm and the system height above ground level but without lanters is 390 mm. The height of the system above ground level with planters is approximately 576 mm.

There is a PVC sand filter of 315 dia x 1494 height in the unit below ground level. It also comprises of SS screen of 304 grade with filter area of 735 sq cm. and can hold 0.04 cubic meter of filtration sand.

The inlet and outlet of the system is 110 diameter UPVC Heavy Grade Pipes. The entire system contains proximately 0.06 cubic meter gravels of 40 mm size. Depth is 60 ft.

Both the system were commissioned on 17<sup>th</sup> March 2017. Cost of implementation of the scheme was Rs. 6.29 Lakhs.





### **Central Pollution Control Board**

(Ministry Of Environment, Forest and Climate Change, Govt. of India)

Parivesh Bhawan, East Arjun Nagar Delhi-110032

Regn. No. BO-27-000-06-AAAAI0050M-22 Date: 28/06/2022 04:30 PM

### RENEWAL OF REGISTRATION CERTIFICATE FOR BRAND OWNER

(Under Rule-13(2) of the Plastic Waste Management Rules, 2016, as amended)

To,

INDIAN FARMERS

**FERTILISER** 

**COOPERATIVE** 

LIMITED (IFFCO),

IFFCO SADAN, C-1,

DISTRICT CENTRE,

SAKET PLACE

With reference to the application dated 27/05/2022 regarding registration as a Brand Owner, this is to inform that your application has been processed and found in order. Now, therefore, Central Polution Control Board Board is pleased to grant the registration in favour of INDIAN FARMERS FERTILISER COOPERATIVE LIMITED (IFFCO), vide registered office address IFFCO SADAN, C-1, DISTRICT CENTRE, SAKET PLACE, as a Brand Owner, for disposal of MLP & other plastic waste generated due to their products as per the EPR Action Plan given below:

Sl. No	Financial Year	2022-23					
	State/UT	Cat-I	Cat-II	Cat-III	Cat-IV		
1	СРСВ	485.45	0.00				
TOTAL		485.45	23526.65	0.00	0.00		
Grand Total		24012.1 TPA					

This certificate of registration shall be valid for a period of **Three years** from the expiry date of previous registration i.e. 26/05/2022 unless revoked, suspended or cancelled. The Registration is granted subject to the following terms & conditions: -

- 1. The Brand Owner shall fulfil the categorize EPR Targets for the year 2022-23 as specified in the above table. For the subsequent years, EPR Target shall be calculated based on the information provided in the Annual report, the format of which shall be specified by CPCB.
- 2. The Brand Owner shall provide certificate only from registered plastic waste processors as evidence of fulfilling their EPR obligation. The PIBO can meet the EPR obligation under a category by providing EPR certificates from other PIBOs of the same category.
- 3. Exchange of EPR credit between PIBOs and Plastic Waste Processors (PWP) to be done as per mechanism provided by CPCB.
- 4. The Brand Owner shall not deal with any entity not registered through on-line centralized portal developed by Central Pollution Control Board.
- 5. The Brand Owner shall not engage in manufacture, stocking, distribution, selling of banned SUP items as listed in Amendment to PWM Rules dated August 12, 2021
- 6. In case, it is found or determined that any PIBO registered on the on-line portal has provided false information or has willfully concealed information or there is any irregularity or deviation from the conditions stipulated while obtaining registration under Extended Producer Responsibility guidelines, then the registration of such an entity would be revoked for a one-year period after giving an opportunity to be heard. The entities whose registration has been revoked shall not be able to register afresh for the period of revocation.
- 7. The Brand Owner should ensure compliance with provisions of the PWM Rules, 2016, as amended. Action, as deemed fit, including revocation of registration, closure of unit, levying Environmental Compensation charges, shall be taken against violators of PWM Rules.
- 8. CPCB reserves the right to take such action as deemed fit under Environment (Protection) Act, 1986 for violation of PWM Rules, 2016, as amended, if any, by the concerned PIBO for the period prior to grant of registration.

Div. Head, UPC-II



### **Gujarat Pollution Control Board**

Paryavaran Bhawan, Sector 10-A, Gandhi Nagar- 382010, Gujarat

Regn. No . PR-02-GUJ-01-AAAAI0050M-23 Date: 02-01-2023 12:24 PM

#### **REGISTRATION CERTIFICATE FOR PRODUCER**

(Under Rule-13(2) of the Plastic Waste Management Rules, 2016, as amended)

To,
INDIAN FERMARS
FERTILISER COOPERATIVE
LIMITED(Legal Name)
(Trade Name: IFFCO),
IFFCO SADAN, C-1, DISTRICT
CENTRE, SAKET PLACE, NEW
DELHI

With reference to the application dated **28-11-2022** regarding registration as a **Producer**, this is to inform that your application has been processed and found in order. Now, therefore, Gujarat Pollution Control Board is pleased to grant the registration in favour of **INDIAN FERMARS FERTILISER COOPERATIVE LIMITED**, vide registered office address **IFFCO SADAN, C-1, DISTRICT CENTRE, SAKET PLACE, NEW DELHI**, as a Producer, for disposal of MLP & other plastic waste generated due to their products as per the EPR Action Plan given below:

SI. No	Financial Year	2022-23			
	State/UT	Cat-I	Cat-II	Cat-III	Cat-IV
1	GUJARAT	0	0.0	0.0	0.0
TOTAL		0	0.0	0.0	0.0
Grand Total		0.0			

This certificate of registration shall be valid for a period of **One Year** from the date of issue of the letter unless revoked, suspended or cancelled. The Registration is granted subject to the following terms & conditions: -

1. The Producer shall fulfil the categorize EPR Targets for the year 2022-23 as specified in the above table. For the subsequent years, EPR Target shall be

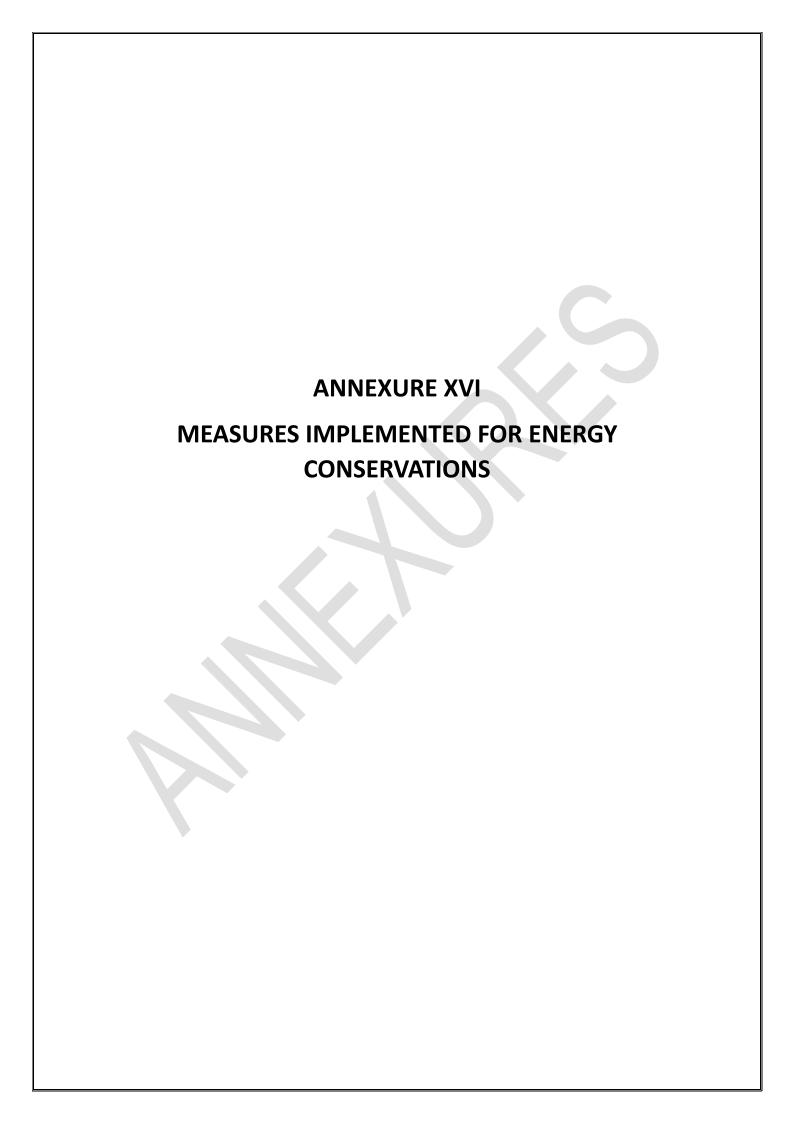
calculated based on the information provided in the Annual report, the format of which shall be specified by CPCB.

- The Producer shall provide certificate only from registered plastic waste processors as evidence of fulfilling their EPR obligation. The PIBO can meet the EPR obligation under a category by providing EPR certificates from other PIBOs of the same category.
- 3. Exchange of EPR credit between PIBOs and Plastic Waste Processors (PWP) to be done as per mechanism provided by CPCB.
- 4. The Producer shall file annual return of fulfilling of EPR obligation as per targets given above in the proforma prescribed by CPCB by June 30 of the next financial year. The information related to fulfillment of EPR obligations and annual report to be filed on the centralized EPR portal developed by CPCB for the purpose.
- 5. Every Producer shall maintain a record of details of the person engaged in supply of plastic used as raw material to manufacture carry bags or plastic sheet or like or cover made of plastic sheet or multi-layered packaging.
- 6. The Producer shall pay Annual fee for processing of Returns as per Guidelines by CPCB.
- 7. The Environment Compensation, as applicable, shall be levied by CPCB/SPCB/PCC on PIBO the with respect to non-fulfillment of their Extended Producer Responsibility targets, responsibilities and obligations as per Guidelines specified by CPCB.
- 8. An application for the renewal of a Registration shall be made at 90 days prior to expire of validity, along with the necessary information & documents as per the Guidelines issued by the MoEF&CC and CPCB from time to time
- 9. The Producer shall not deal with any entity not registered through on-line centralized portal developed by Central Pollution Control Board.
- 10. The Producer shall not engage in manufacture, stocking, distribution, selling of banned SUP items as listed in Amendment to PWM Rules dated August 12, 2021.

- 11. In case, it is found or determined that any PIBO registered on the on-line portal has provided false information or has willfully concealed information or there is any irregularity or deviation from the conditions stipulated while obtaining registration under Extended Producer Responsibility guidelines, then the registration of such an entity would be revoked for a one year period after giving an opportunity to be heard. The entities whose registration has been revoked shall not be able to register afresh for the period of revocation.
- 12. The Producer should ensure compliance with provisions of the PWM Rules, 2016, as amended. Action, as deemed fit, including revocation of registration, closure of unit, levying Environmental Compensation charges, shall be taken against violators of PWM Rules.
- 13. Gujarat Pollution Control Board reserves the right to take such action as deemed fit under Environment (Protection) Act, 1986 for violation of PWM Rules, 2016, as amended, if any, by the concerned PIBO for the period prior to grant of registration.
- 14. Type of plastic and recycled content for different components of commodity to be included in the label on the commodity

Terms and Conditions :- AS Per PWM Rules-2016

**Member Secretary** 



Annexure – XVI

### Measures Implemented for Energy Conservation during last 03 Years:

Sr. No.	Energy conservation steps implemented during the Year 2020-21	Expen- diture incurred Rs.	Saving in Natural resources (NG, Naphtha, FO, water etc.)		
		Lakhs	kW/day	Rs. lakhs Per Year	
	IFFCO Plant				
1	Replacement of 20 nos. of conventional street light of 70 W with hybrid solar light fitting of 35 W.	0.60	11.2	0.35	
2	Replacement of 50 nos. conventional 2X36W light fittings with 34W LED light fittings in buildings.	1.6	20	0.62	
3	Replacement of 100 nos. conventional 36W light fittings with 15W LED light fittings in buildings.	0.60	11	0.34	
4	Replacement of 150 nos. conventional 500W flood light fittings with 35W LED light fittings in shutdown for temporary lighting provision (one time saving in every ATA)	0.93	279	0.47	
	Total	3.73		1.78	
	Township				
1	Replacement of 06 nos. conventional 400W flood light with 150W LED flood light in high mast tower	0.54	12	0.37	
2	Replacement of 100 nos. 70W Ceiling fan with 53W energy efficient fan at township quarter.	1.5	12	0.37	
3	Replacement of 100 nos. 35W Ceiling fan with 9W energy efficient fan at township quarter.	0.085	31.2	0.97	
	Total	2.125		1.71	

	Energy conservation steps implemented during the Year 2021 - 22	Expen- diture incurred Rs.	Saving in Natural resources (NG, Naphtha, FO, water etc.)		
		Lakhs	kW/day	Rs./day	
	IFFCO Plant				
1	Replacement of conventional street light fitting of 70 W with hybrid solar light fitting of 35 W at street light	0.6	11.2	95	
2	Replacement of conventional 2X36W light fittings with 34W LED light fittings in buildings	1.6	20	170	
3	Replacement of conventional 36W light fittings with 15W LED light fittings in buildings	0.6	5.5	47	
	Total	2.8		312	
	Township				
1	Replacement of conventional 400W flood light with 150W LED flood light in high mast tower	0.54	12	102	
2	Replacement of 70W Ceiling fan with 53W energy efficient fan at township quarter	0.75	6	51	
3	Replacement of 15W light fittings with 9W energy efficient LED light fittings at township quarter	0.085	16	139	
	Total	1.375		292	

## Implemented during 2022 - 23 Plant:

 Replacement of conventional light fittings with LED luminaries in purchase & F &A section.

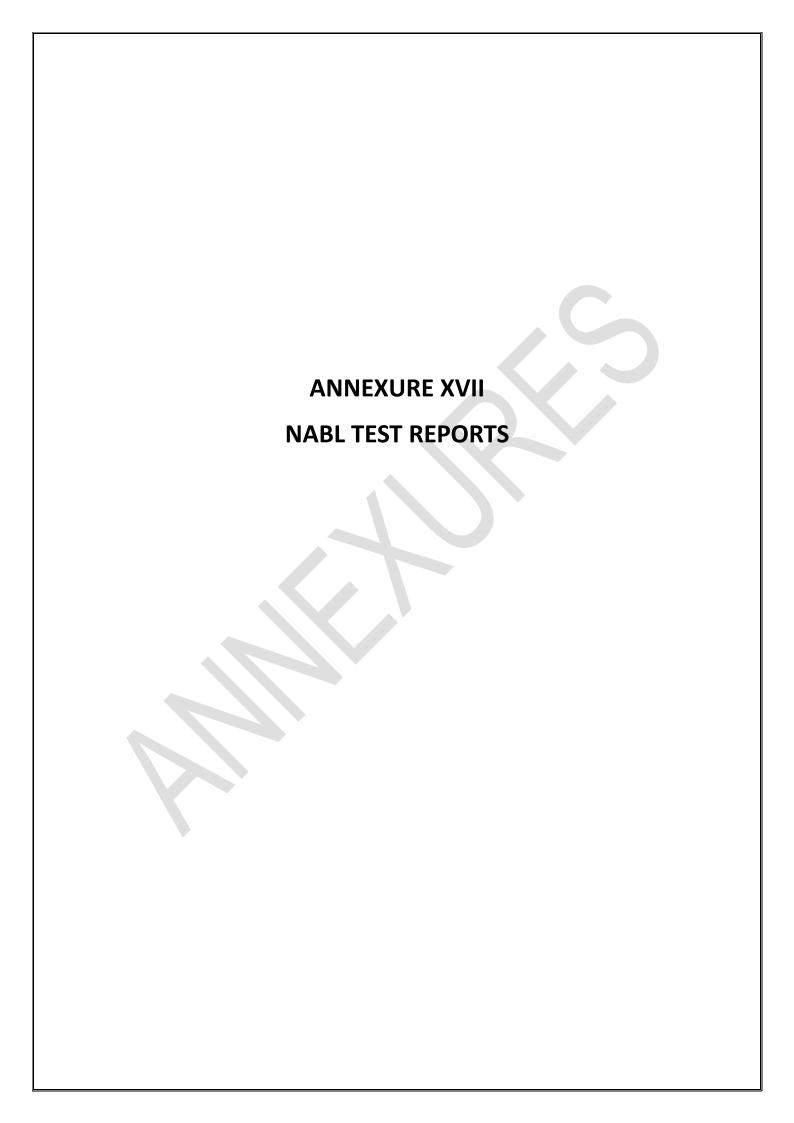
### Township:

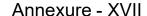
Replacement of sign boards with latest LED sign boards in township to save energy.
 Control of LED sign boards with digital timer for limited time during 19:00 Hrs to 22:30
 Hrs for energy saving with saving detailed below:

Power saving =150W +20W
Energy saving per day = 170x7=1190Whr
Annual energy saving = 1190 x365 = 434350Whr = 434.35 units
Rate per unit = Rs 8.5
So annual monetary saving per fitting = 8.5 x 434.35 = Rs 3691.975

Total 24 nos of LED fittings in high mast towers & 4 numbers of LED sign boards are switched OFF for whole night by using digital timer.

 Replacement of conventional ceiling/exhaust fans with energy efficient fans in quarters and public buildings.







### **Details of Noise Control Measures**

IFFCO Kalol has various machines like dryers, blowers, vacuum pumps, process pumps, turbines, compressors etc. along with DG sets, Boiler, which generates noise. These machines are already inbuilt with appropriate control measures to maintain the noise levels within limits.

Generally, noise level of working place is within the limit as specified in the standard of MoEF&CC. However, Kalol unit have issued earmuffs/ plugs to all concerned employees for usage while working in noisy environment. The equipment like Compressors, blowers, fans, various drums and elevators are provided with Acoustic pad insulation / Acoustic enclosures to limit the noise level as per the standard of MoEF&CC. Noise level at Boundary Fence are controlled by providing green belt throughout the boundary wall of plant. Wherever required vent silencers are installed to reduce noise level in the plant. Details of Noise Control Devices is given below:

#### **Noise Control Devices**

Plant	Noise Control Devices	Method of control				
Noise Abatement in Plant Area	Vent Silencers, Insulations and tree plantation / inside & outside the plant	<ul> <li>Silencers have been provided at vent stacks to reduce the noise level.</li> <li>Also, to reduce noise level in compressor area, the gas lines are insulated.</li> <li>Green belt in the plant and all around the plant boundary also contribute positively in minimizing the impact on noise level.</li> <li>Diesel Generation set is operated once in a week for trail purpose. Acoustic enclosure has been provided in the Diesel Generator Room.</li> <li>Issued ear muffs / plugs to all the employees and usage of ear muffs / plugs while working in noisy environment is already in practice.</li> </ul>				
Vent S	ilencer in Ammonia Plant	Vent Silencer in BHEL Boiler				
	Photographs of No	ise Control System				



awhenvirotech@gmail.com



13, Pushpak Industrial Estate, Phase-1, GIDC Vatva,

Ahmedabad - 382445 www.awhenvirotech.in

Report ID: AWH/R/23-24/526 Date: 20/09/202							
	TEST REPORT						
Name & Address of Unit  Name & Address of Unit  M/s. Indian Farmers Fertilizer Co. Ltd. 712/846,866,856 of Saij, 17-37 of Dhanej, P.O. Kasturi Nagar, Tal.: Kalol-382423, Dist.: Gandhinagar.							
Sampling Date	:	15-09-2023	Sampling Type	:	Noise – Ambient Noise		
Sample Receipt Date	:	15-09-2023	Inward ID	:	AWH/23-24/526		
Sample Collected / Submitted by	:	AWH Team	Sampling Method	:	IS 9989 – 1981 (RA 2014)		

### **Analysis Results**

Sr. No.	Sampling Location	Result	Unit	GPCB Permissible limit
1	Nr. R&D Lab.	62.1	dB(A) Day	75
2	Nr. System	58.6	dB(A) Day	75
3	Nr. Training Building	67.8	dB(A) Day	75
4	Nr. Time Office	64.3	dB(A) Day	75
5	Nr. Boiler Control Room	64.9	dB(A) Day	75
6	Nr. Urea Control Room	67.0	dB(A) Day	75
7	Nr. Ammonia Control Room	72.6	dB(A) Day	75
8	Nr. Railway Office	64.6	dB(A) Day	75
9	Nr. Fire & Safety	61.3	dB(A) Day	75
10	Nr. Central Lab.	70.7	dB(A) Day	75
11	Nr. Instrument	60.3	dB(A) Day	75
12	Nr. Technical Building	66.9	dB(A) Day	75
13	Nr. Store	68.2	dB(A) Day	75
14	Nr. Dispensary	57.3	dB(A) Day	75
15	Nr. B & MH Control Room	69.1	dB(A) Day	75
16	Nr. Ammonia Maintenance	60.8	dB(A) Day	75
17	Nr. Railway Gate No. 2	54.0	dB(A) Day	75

Sumit Patel (CEO)/ Ashka Patel (QM) **Authorized Signatory** 

**End of Test Report** 

#### Note

- 1. BDL: Below Detectable Limit.
- 2. The results listed herewith is applicable for the tested item only.
- 3. This report shall not be reproduced part or in full without written permission of the AWH LABORATORY.
- 4. Sample is to be disposed after 10 days from the date of issue of the report unless agreed with the customer.
- $5. \hspace{0.5cm} \text{In case when laboratory is not involved in Sampling, the results apply to the sample as received}. \\$



awhenvirotech@gmail.com



13, Pushpak Industrial Estate, Phase-1, GIDC Vatva, Ahmedabad - 382445

www.awhenvirotech.in

Report ID: AWH/R/23-24/527 Date: 20/09/2023							
		TES	T REPORT				
M/s. Indian Farmers Fertilizer Co. Ltd.  Name & Address of Unit  1. 712/846,866,856 of Saij, 17-37 of Dhanej, P.O. Kasturi Nagar, Tal.: Kalol-382423, Dist.:  Gandhinagar.							
Sampling Date	:	15-09-2023	Sampling Type	:	Ambient Air		
Sample Receipt Date	:	16-09-2023	16-09-2023 Inward ID				
Sample Collected / Submitted by	:	AWH Team	Sampling Method	:	IS 5182 (Part 14)		
Sampling Location	:	On Terrace Of R&D building	Packing / Seal	:	Zip lock Bag/ Plastic Bottle		
Sample Type	:	Ambient Air	Analysis Start Dato		16.00.2022		
Sample Description	:	Near R&D Laboratory	Alialysis Start Date   .   10-03-2025				
Quantity / No. of Sample	4:	2 Filter Papers & Absorbing Media	Analysis Completion Date	:	19-09-2023		

### **Analysis Results**

Sr. No.	Parameter	Unit	Result	GPCB Permissible limit	Test Method
1	Particulate matter (PM <sub>10</sub> )	μg/m³	48.33	100	IS 5182 (Part 23): 2006
2	Particulate matter (PM 2.5)	μg/m³	35.08	60	IS 5182 (Part 24): 2019
3	Sulphur Dioxide (SO₂)	μg/m³	4.12	80	IS 5182 (Part 02): 2001
4	Oxides of Nitrogen (NO <sub>2</sub> )	μg/m³	17.56	80	IS 5182 (Part 06): 2006
5	Ammonia	mg/Nm <sup>3</sup>	27.69	400	IS 5182 (Part 25): 2018

**End of Test Report** 

Sumit Patel (CEO)/ Ashka Patel (QM) **Authorized Signatory** 

#### Note

- 1. BDL: Below Detectable Limit.
- The results listed herewith is applicable for the tested item only.
- 3. This report shall not be reproduced part or in full without written permission of the AWH LABORATORY.
- Sample is to be disposed after 10 days from the date of issue of the report unless agreed with the customer.
- In case when laboratory is not involved in Sampling, the results apply to the sample as received.



awhenvirotech@gmail.com

13, Pushpak Industrial Estate, Phase-1, GIDC Vatva,

Ahmedabad - 382445

www.awhenvirotech.in

Report ID: AWH/R/23-24/528 Date: 20/09/20					Date: 20/09/2023		
		<u>TE</u>	ST REPORT				
Name & Address of Unit	:	1 -	M/s. Indian Farmers Fertilizer Co. Ltd. 712/846,866,856 of Saij, 17-37 of Dhanej, P.O. Kasturi Nagar, Tal.: Kalol-382423, Dist.: Gandhinagar.				
Sampling Date	:	15-09-2023					
Sample Receipt Date	:	16-09-2023	6-09-2023 Inward ID : A				
Sample Collected / Submitted by	:	AWH Team	Sampling Method	:	IS 5182 (Part 14)		
Sampling Location	:	Near Cooling Tower	Packing / Seal	:	Zip lock Bag/ Plastic Bottle		
Sample Type	1:	Ambient Air	Analysis Start Data		16 00 2022		
Sample Description	1	Near Cooling Tower	Aliaivsis statt Date 1. 10-03-2023				
Quantity / No. of Sample	1	2 Filter Papers & Absorbing Media	Analysis Completion Date	:	19-09-2023		

### **Analysis Results**

Sr. No.	Parameter	Unit	Result	GPCB Permissible limit	Test Method
1	Particulate matter (PM₁o)	μg/m³	53.64	100	IS 5182 (Part 23) 2006
2	Particulate matter (PM 2.5)	μg/m³	37.2	60	IS 5182 (Part24) 2019
3	Sulphur Dioxide (SO₂)	μg/m³	1.98	80	IS 5182 (Part 02) 2001
4	Oxides of Nitrogen (NO <sub>2</sub> )	μg/m³	13.60	80	IS 5182 (Part 06) 2006
5	Ammonia	mg/Nm <sup>3</sup>	17.16	400	IS 5182 (Part 25) 2018

**End of Test Report** 



Sumit Patel (CEO)/ Ashka Patel (QM) **Authorized Signatory** 

- BDL: Below Detectable Limit. 1.
- The results listed herewith is applicable for the tested item only.
- ${\it 3.} \qquad {\it This report shall not be reproduced part or in full without written permission of the AWH LABORATORY.}$
- 4. Sample is to be disposed after 10 days from the date of issue of the report unless agreed with the customer.
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awhenvirotech@gmail.com

13, Pushpak Industrial Estate, Phase-1, GIDC Vatva, Ahmedabad - 382445

www.awhenvirotech.in

Report ID: AWH/R/23-24/529					Date: 20/09/2023		
TEST REPORT							
Name & Address of Unit	:	M/s. Indian Farmers Fertilizer Co. Ltd. 712/846,866,856 of Saij, 17-37 of Dhanej, P.O. Kasturi Nagar, Tal.: Kalol-382423, Dist.: Gandhinagar.					
Sampling Date	:	15-09-2023	Sampling Type		Ambient Air		
Sample Receipt Date	:	16-09-2023	Inward ID		AWH/23-24/529		
Sample Collected / Submitted by	:	AWH Team	Sampling Method	:	IS 5182 (Part 14)		
Sampling Location	:	Near Training Center	Packing / Seal		Zip lock Bag/ Plastic Bottle		
Sample Type		Ambient Air	- Analysis Start Date		16-09-2023		
Sample Description	/ ;	Near Training Room					
Quantity / No. of Sample	:	2 Filter Papers & Absorbing Media	Analysis Completion Date		19-09-2023		

### **Analysis Results**

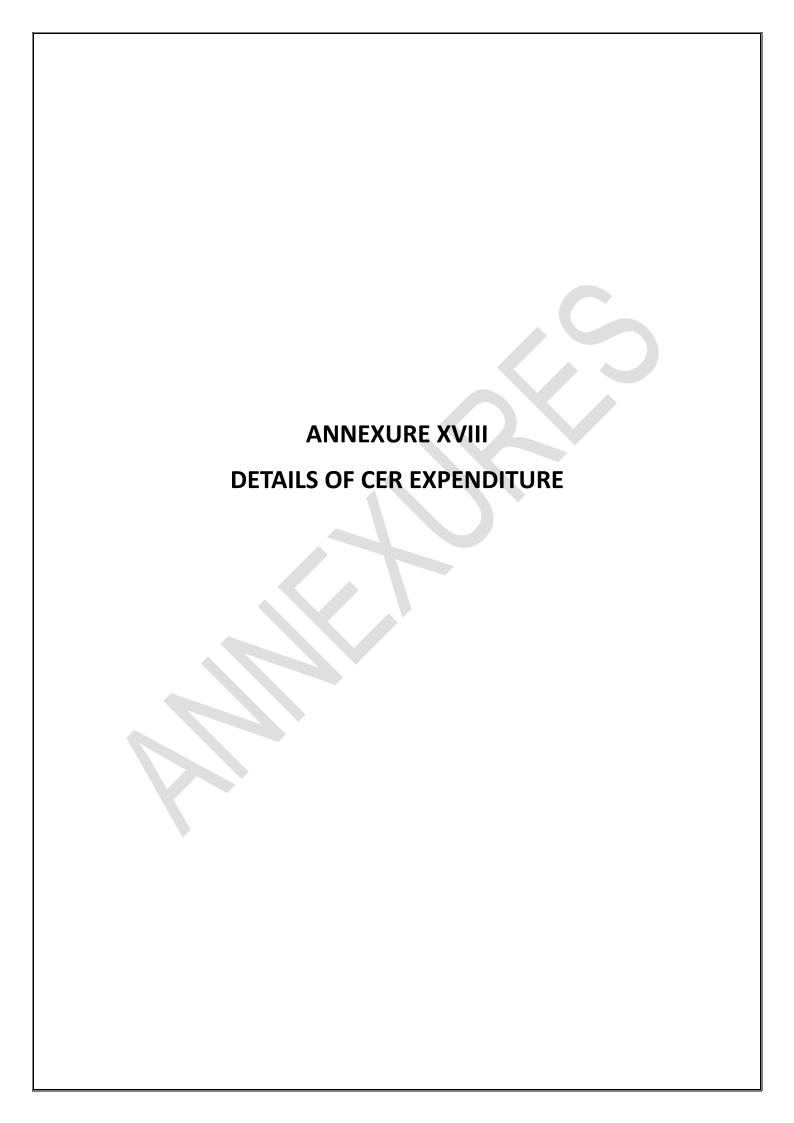
Sr.	Parameter	Unit	Result	GPCB Permissible	Test Method	
No.	Parameter	Onit	Result	limit	rest iviethod	
1	Particulate matter (PM <sub>10</sub> )	μg/m³	52.03	100	IS 5182 (Part 23) 2006	
2	Particulate matter (PM 2.5)	μg/m³	34.15	60	IS 5182 (Part - 24):2019	
3	Sulphur Dioxide (SO₂)	μg/m³	2.01	80	IS 5182 (Part 02) 2001	
4	Oxides of Nitrogen (NO₂)	μg/m³	21.36	80	IS 5182 (Part 06) 2006	
5	Ammonia	mg/Nm <sup>3</sup>	35.57	400	IS 5182 (Part 25) 2018	

**End of Test Report** 

Sumit Patel (CEO)/ Ashka Patel (QM) **Authorized Signatory** 

#### Note

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- In case when laboratory is not involved in Sampling, the results apply to the sample as received.







### **ECO - DEVELOPMENTAL MEASURES**

#### 1. Social Economic Development:

IFFCO Kalol is committed to contribute for the sustainable economic development of farmers, local community and Society at large to improve their quality of life. IFFCO Society has under taken various activities in the areas for community development, environment protection, horticulture, health care/ medical facilities and literacy enhancement / empowerment programmes. To bridge the gap between farming community & industry and for development of surrounding villages, IFFCO Kalol Unit has carried out development activities in surrounding villages like organizing Eye Camps& Blood Donation Camp, providing Drinking water system, various facilities in schools, construction of Dhobi Ghats etc., construction of Toilets in schools & villages, construction of cattle-sheds, providing practical training to farmers to improve their skills in crop & animal husbandry, organizing veterinary camps, farm mechanization, balance fertilization, use & distribution of bio-fertilizers, training for tailoring & embroidery, adult education programmes, fruits and vegetables preservation, etc. CSR activities are undertaken by IFFCO in two segments i.e., unit level and corporate level. Activities undertaken at Unit level as a part of IRDP / CSR in nearby area during last three and half years are mentioned below in Table 1.1

S. No.	Short Description, Village and Taluka	Cost Rs. Lakh				
Expenditure during the year 2022 – 23						
1	Paver block provided at Sanskar Tirth, Village - Ajol, Dist: Gandhinagar	2.0				
2	Shed provided at Cremation Ground of Dhanaj Gram Panchayat, Village - Dhanaj, Tal Kalol, Dist: Gandhinagar	2.0				
3	RCC road constructed at Shertha Gram Panchayat Village - Shertha, Dist: Gandhinagar	2.0				
4	Drinking Water Facility provided at Shri B H Patel High School, Village - Mathasur, Taluka – Kadi, Dist: Mehsana	2.0				
5	Paver block provided at Smt J M G High School, Village - Shertha, Dist: Gandhinagar	2.0				
6	Paver block provided at Adalaj Gram Panchyat premises Village Adalaj, Dist: Gandhinagar	1.8				
7	Wire fencing provided at compound wall of Usamabad Prathamik Sala, Kalol, Dist: Gandhinagar	1.6				
8	Scientific apparatus provided at Swami Vivekananda Education Trust, Kadi, Dist: Mehsana	1.0				
9	Wire frame provided for protection of sapling planted nearby saig village by Saij Gram Panchayat Village: Saij, Taluka - Kalol, Dist: Gandhinagar	1.0				
10	Electrical poles installed roadside of Bhoyan village Dist: Gandhinagar	2.0				
11	Electrical poles installed roadside of Dantali village Dist: Gandhinagar	2.0				



S. No.	Short Description, Village and Taluka	Cost Rs. Lakh
12	Benches for class room of Moti Adraj Kanya Prathmik shala Dist: Gandhinagar	1.25
13	RCC road constructed at Saij Gram Panchayat Village - Saij, Dist: Gandhinagar	2.0
14	Stabilizer for Operation Theater of Health care center of Gram Vikas mandal Village: Paliyad Dist: Gandhinagar	2.0
15	4 Toilet block Reparing work done of Prathmik Shala -Kalol	2.0
16	Baby care unit provided to Primary health centre Village : Uvarsad Dist: Gandhinagar	0.38
17	4 Nos of ceiling fans provided at SANSKAR TIRTH Village: Ajol, Dist: Gandhinagar	
	4 Nos of ceiling fans provided at Kalol Police Station, Kalol, Dist: Gandhinagar	
	3 nos of Computers were given to Child Welfare School, Dist: Gandhinagar	
	2 nos of Computers were given to Himmatpura Veda Prathamik Shala, Kalol, Dist: Gandhinagar	Free of Cost
	2 nos of Computers were given to Mithivadadhi Prathamik Shala, Patan	
	4 nos of Computers were given to Amrit Vidhya School, Kalol, Dist: Gandhinagar	
	2 nos of Computers were given to Rajmatat Higher Secondary School, Mansa, Dist: Gandhinagar	
	2 nos of Computers were given to Maruti Charitabale Trust, Dist: Gandhinagar	
	Total Amount	27



S. No.	Short Description, Village and Taluka	Cost Rs. Lakh
	Expenditure during the year 2021 - 22	
1	Water cooler with RO unit provided at Police Station, Village – Adalaj	0.32
2	Shed for cows & injured animals provided at Bhatia Foundation Trust	2.0
3	High mask electrical Tower provided at Gram Panchyat Village - Dhanaj	2.0
4	Paver block provided at school premises Vasudev Grant in aid Residential Primary School Kalol, Gandhinagar	1.18
5	Shade provided and compound wall constructed at PHC, Gram Aarogay Kendra, Village – Dantali	2.0
6	Compound wall constructed at cremation area of Pratappura Gram Panchyat Tal Kalol, Dist. – Gandhinagar	2.0
7	Paver block provided at Ambapur Prathamik Shala, Village – Ambapur, Dist Gandhinagar	2.0
8	Santitation work carried out in Shri Bhoyanarathor Prathamik Shala toilet blocks, Village – Bhoyanarathor, Dist Gandhinagar	2.0
9	Two nos. of solar LED lamps provided at Tintoda Gram Panchyat Village – Tintoda, Dist. – Gandhinagar.	0.5
10	Paver block provided at Shertha Gram Panchyat Village – Shertha, Dist. – Gandhinagar.	2.0
11	RCC road constructed at Saij Gram Panchyat, Village –Saij, Dist. – Gandhinagar.	2.0
12	Playing apparatus provided for children of Child Welfare Grah, at Government Children Home, Sector 17, Gandhinagar.	2.0
13	Medical apparatus procured for General Hospital of Gram Vikash Mandal sanchalit Trust, Village – Paliyad, Dist. – Gandhinagar	2.0
14	Paver block provided at Sadvichar Parivar Viklang Punervas Kendra, Village – Uvarsad, Dist. – Gandhinagar	2.0
15	5 nos of Computers were given to Gopal nagar primary School, Kalol, Dist. – Gandhinagar	
	1 no of computer was given to Gyanmandir Higher secondary school, Patan	
	6 nos of computers were given to CORDET, Kalol for training to local community	
	1 no of computer was given for projector of Prathmik shala No. 08, Kalol, Dist. – Gandhinagar	
	4 nos of Computers were given to Adarsh Primary School, Mansa, Dist. – Gandhinagar	
	2 nos of Computers were given to Shree Parbatpura Sarvajanik Pustakalay, Mansa, Dist. – Gandhinagar	
	4 nos of computers were given to Mamlatdar Office, Kalol	24
	Total Amount	24



S. No.	Short Description, Village and Taluka	Cost Rs. Lakh				
	Expenditure during the year 2020-21					
1	Shed at Police Station Uvarsad	2.0				
2	LED Street Light provided at Dhanaj Village	1.0				
3	LED Lights and Poll at Adalaj Police Station	2.0				
4	Motor, Pump Set & Cable work at Saij Village	2.0				
5	Room construction work at Shri Sharda Vidhyapith, Dwarka	2.0				
6	Repairing work of Prayer Hall at Tintoda Village School	2.0				
7	Tailoring class at CORDET, IFFCO Kalol	0.74				
8	Construction work at Sadvichar parivar, Uvarsad	2.0				
9	Construction of shed at school, Bhoyan rathod Village	2.0				
10	Construction of shed at school, Dhanaj Village	1.0				
11	12 Nos computers given to Ambapur Primary school	Free				
	Total Amount	16.74				
	Expenditure during the year 2019-20					
1	LED Lights -Shertha Village	2				
2	Parking Area -St. Xavier School Kalol	2				
3	Shed to the School- Veda Primary School Ahmedabad	2				
4	R C C work in Shmashaan Gruh , Kakanu Tarapur	2				
5	Electric pole/fittings/cabling work- Adalaj Police station	1.71				
6	Electrification work/ pole light /GEB connection- Shertha village	1.26				
7	Paver block in shmashaan gruh- Ambapur village	2				
8	Wall of school & varanda- Shertha para	2				
9	Wall & room at shmashaan gruh- Jamiyatpura	2				
10	For training at CORDET	0.67				
11	R C C Road at Saij village, Saij Gram Panchayat	2				
12	6 computers given to Randheja kelavani mandal					
	2 computers given to Mansa General Hospital					
	10 computers given to Shri Shertha kelvani mandal	Free				
	7 computers given to Smt S A B Patel Panchshil Vidyalay					
	Total Amount	19.64				

Table 1.1: Social Infrastructure facilities provided by IFFCO in nearby villages



### 2. Cooperative Rural Development Trust (CORDET)

IFFCO has established CORDET – Co Operative Rural Development Trust under Indian Trust Act. Cooperative Rural Development Trust namely CORDET is a charitable trust registered under Indian Trust Act since 1978 (9<sup>th</sup> October, 1978) to provide education and training to farmers. The CORDET units are set up at Phulphur, Kalol and Kandla locations. CORDET is instrumental in demonstrating various farming system models to increase the farm income by organizing various trainings and skill development programs for youth and women. It has demonstrated crop production system, dairy, balanced fertilization, use of bio-fertilisers, bee-keeping, pisciculture, computer use, screen printing, welding, tailoring and embroidery also distributed Sewing Machine every year 60 machine, adult education programmes, fruits and vegetables preservation etc. at Kalol units.

Major activities carried out in CORDET during last three years

Sr No	Year / Duration	Number of training programs organized for farmers from various States & Women from nearby villages	participants (farmers and women) in the		Production of bio fertilisers in Lakh litres
1	2020-21	304	30712	142974	11.59
2	2021-22	170	13739	72396	2.641
3	2022-23	125	15010	229294	3.21

Apart from above, Integrated Rural Development Program (IRDP) has been undertaken in various villages. A variety of social and promotional activities like construction of community centres, drinking water facility, tree plantation, soil testing campaigns, supply of cattle feed, promotion of vermi compost, mini-kit distribution (CIP) etc. were undertaken in these villages. Around 67 programmes in various field have been organized during FY 2022 - 23 which benefitted 4818 farmers.

### 3. Social Activities at Corporate Level (Non-Profit)

### i. IFFCO Kisan Sewa trust:

A Charitable Trust created out of joint contributions from IFFCO & its employees has undertaken variety of activities to assist poor and needy farmers affected due to natural calamities such as earthquake, flood, Tsunami etc. It also extends helping hand to the farmers in distress due to aberrant weather conditions. The Trust expanded its scope by providing Financial Assistance to the farmers living below poverty line for their critical medical treatment and education scholarship for higher studies to the children of poor & needy farmers.

### ii. Indian Farm Forestry Development Cooperative Limited (IFFDC):

IFFCO had promoted a separate Multi-State Cooperative Society named 'Indian Farm Forestry Development Cooperative Limited' (IFFDC) in 1993 with the prime objective of development of wasteland for tree plantation and to enhance the socio-economic status of rural poor through sustainable Natural Resource Management by collective action. To achieve this, IFFDC initially implemented



afforestation and rural development projects in the States of Uttar Pradesh, Madhya Pradesh and Rajasthan with an objective to improve degraded land, generate employment and provide fuel and fodder to the community. Afforestation in about 29,420 hectare wasteland has been achieved by promoting 152 villages level Primary Farm Forestry Cooperative Societies (PFFCS).

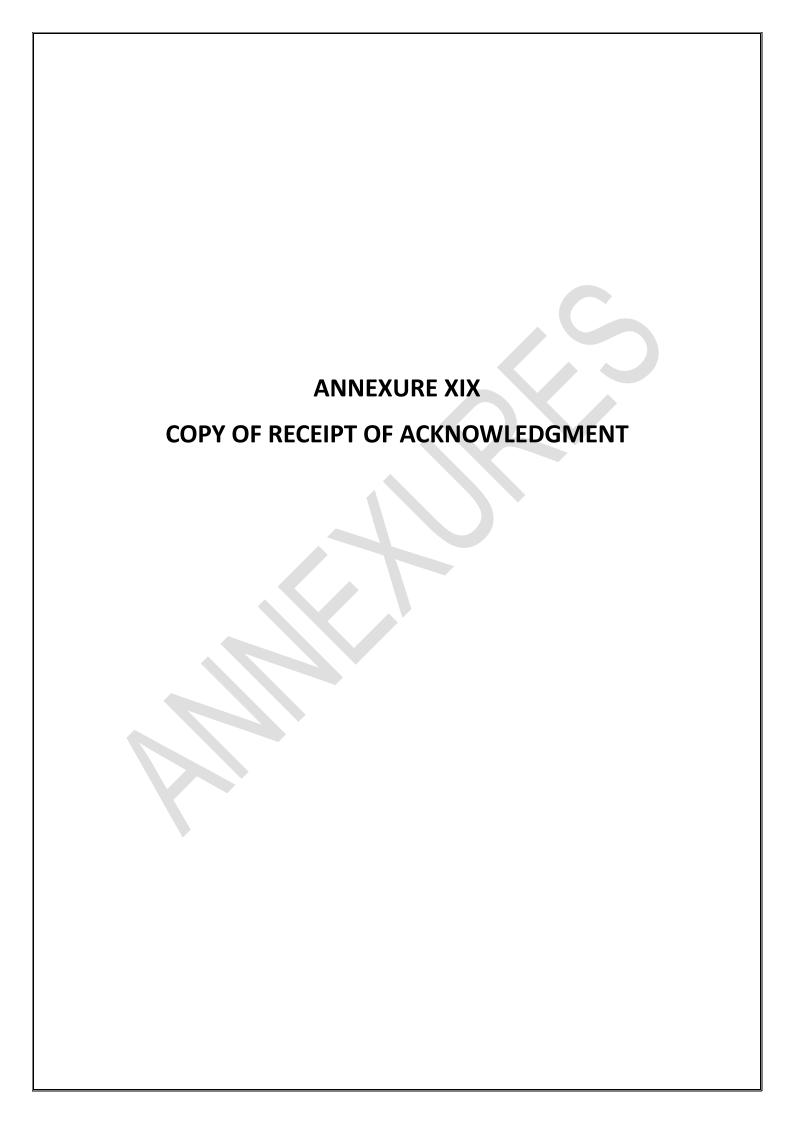
iii. Professors Chairs in Agricultural Universities and Cooperative Institutions:
In order to promote excellence in agricultural research and cooperative education in the country, IFFCO has established Professors' Chairs in Agricultural Universities and Cooperative Institutions. At present, 17 Chairs are set up in different parts of the country. IFFCO Professors' Conferences are held periodically and action plans are discussed.

### iv. Information and Communications Technology:

This module is optimized for the touch screen monitor based "Cyber Dhabas" (Information Kiosks) being set up by IFFCO. Extensive usage of graphics and audio is implemented to encourage usage of the system by visitors from rural India. The same SIM Card which is used for communication, is turned into a powerhouse of knowledge for empowering people living in villages through relevant & pertinent information.

### v. Save the Soil

IFFCO initiated, "Save the Soil Campaign" with focus on soil rejuvenation and crop productivity enhancement for sustainable and environment friendly agriculture. For this, activities were undertaken across the country to promote soil testing, soil reclamation and conservation, application of balanced and integrated use of nutrients, water resource development and conservation, inclusion of pulses in cropping system, crop diversification, farm mechanization etc. In addition, hand holding of farmers and cooperatives was done by providing financial assistance for installation of biogas units, MIS - drip irrigation systems/ sprinkler sets, plastic mulching, farm machinery etc. These efforts have resulted into an average yield increase of 15–25% in various crops; improvement in soil health and above all dissemination of improved farm technologies.





# Pro-Active and Responsive Facilitation by Interactive, Virtuous Environment Single-Window Hub



### Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

To,

The Director

INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO) IFFCO Kalol Unit, P.O. Kasturi Nagar, District Gandhinagar, North Gujarat - 382423,,Gandhinagar,Gujarat-382423

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam.

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/GJ/IND3/412440/2022 dated 21 Feb 2023. The particulars of the environmental clearance granted to the project are as below.

1.	EC Identification	n No.
		A CONTRACTOR OF THE PARTY OF TH

3. Project Type

Category

Project/Activity including Schedule No.

Name of Project

EC23A016GJ154380

J-11011/60/2009-IA-II(I)

Expansion

5(a) Chemical fertilizers

Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and Nano Micronutrients at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanej, Kasturinagar, Kalol GIDC, District -Gandhinagar, Gujarat- 382423

INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)

Location of Project

Name of Company/Organization

Gujarat

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 07/03/2023

(e-signed) Mr. Motipalli Ramesh Scientist E IA - (Industrial Projects - 3 sector)



Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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ધાનજ ગામ પંચાયત

J-11011/60/2009-IA-II(I) Date of Issue EC - 07/03/20

# Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub





### Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

To,

The Director

INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)

IFFCO Kalol Unit, P.O. Kasturi Nagar, District Gandhinagar, North Gujarat - 382423,, Gandhinagar, Gujarat-382423

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

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1.	EC Identification No.	EC23A016GJ154380
2.	File No.	J-11011/60/2009-IA-II(I)
3.	Project Type	Expansion
4.	Category	A

Category

Project/Activity including

5(a) Chemical fertilizers Schedule No. Name of Project 6.

Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer and Nano Micronutrients at Plot no. 712/846, 855, 856 of Saij,17-37 of Dhanej, Kasturinagar, Kalol GIDC, District -Gandhinagar, Gujarat- 382423

7. Name of Company/Organization INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)

Location of Project 8. Gujarat 9. **TOR Date** N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 07/03/2023

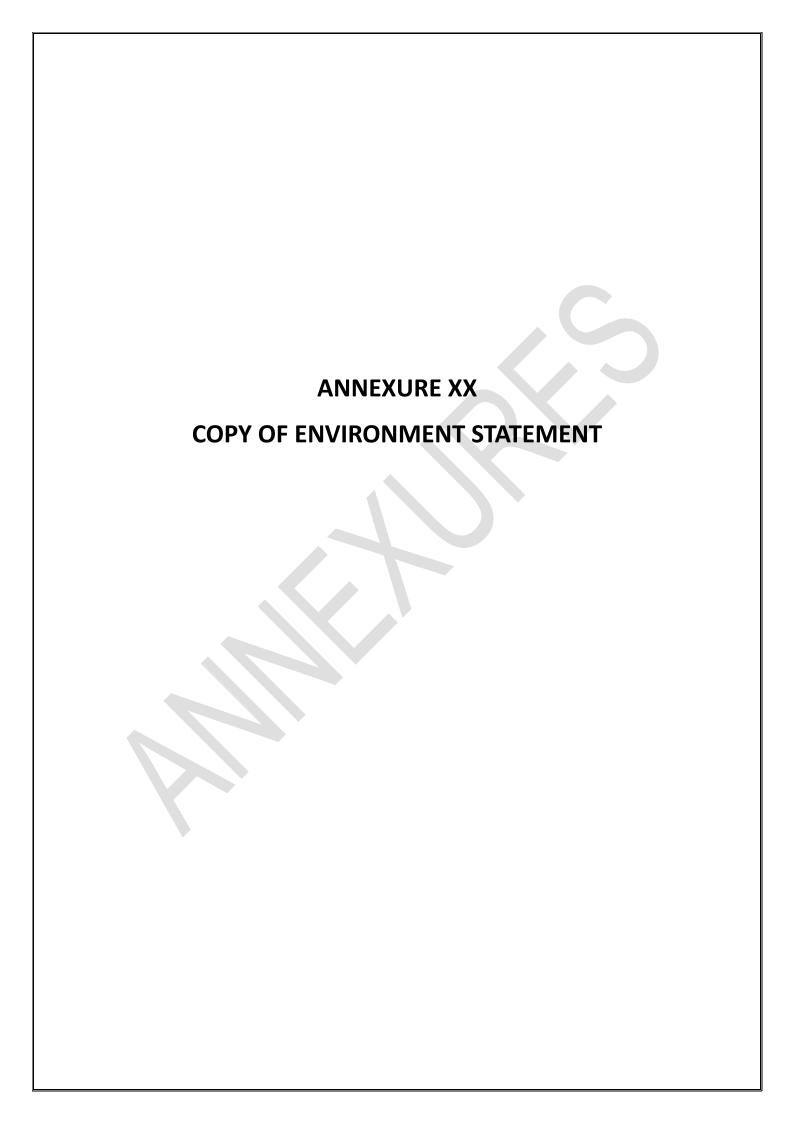
(e-signed) Mr. Motipalli Ramesh Scientist E IA - (Industrial Projects - 3 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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તલાટી કમ મંત્રી શરુશ ગ્રામ પંચાયત તા.ી. ગાંધીનગર











# INDIAN FARMERS FERTILISER COOPERATIVE LIMITED KALOL UNIT

P.O. Kasturinagar, Dist: Gandhinagar (North Gujarat)
PIN Code: 382 423 (INDIA)

EPC/02/2504

Date: 8.8.2023

To,

Member secretary,
Gujarat Pollution Control Board,
Paryavaran Bhavan ,Sector -10 A,
Gandhinagar - 382043
Gujarat.

Sub: Environmental Statement as per Form - V (Environmental Audit Report) for the Year 2022 - 2023

Sir,

Please find attached herewith the Environmental Statement (Environmental Audit Report) pertaining to IFFCO Kalol unit for the year ending on 31st March 2023 as per Form - V.

This is in accordance with the provision of Rule 14 of the Environmental (Protection) Amendment Rule, 1993 of the Environmental (Protection) Act 1986.

Thanking you,

Solil 08/08/2023

(A)

Gujarat Pollution Control Board
Head Office

Encl: as above Gandhinagar-382010

Yours faithfully For IFFCO - Kalol Unit

For IFFCO - Kalol Uni

G. Inamdar) Director

Director

अधावस्था (सवन, सेक्टरे-१००

CC: Shri S. V. Malsattar, Regional Officer, Gandhinagar, GPCB

Phone: 079 - 23282003, 23282005

Fax : 079 - 23286020

Email: dginamdar@iffco.in

Web site Address: www.iffco.in

### FORM - V

From:

Director IFFCO – Kalol Unit P .O. Kasturinagar (PIN 382423) Dist.: Gandhinagar (Gujarat)

To,

Gujarat Pollution Control Board "Paryavaran Bhavan", Sector - 10 A, GANDHINAGAR – 382010

### **ENVIRONMENT STATEMENT** for the financial year ending the 31<sup>st</sup> March 2023.

### PART: A

(i) Name and address of the : Shri. D. G. Inamdar
Owner/ Occupier of the Industry, Operation or process IFFCO - Kalol

(ii) Industry category- : Fertiliser Sector (Nitrogenous)
Primary- (ST. - Code) IFFCO falls under Co-op Societies Act.
Secondary - (SIC Code)

(iii) Production capacity Units : a) Urea 6,75,000 MT/Year (100%) max or

(As per EC F. No. J-11011-60 -2009-IA-II(I) dtd 07 03 2023)

Urea 5,44,500 MT/ Year (100%) &

Diesel Exhaust Fluid - 401538 MT/Year #

(32.5 % Urea Solution) max or Urea 5,44,500 MT/ Year (100%) &

Diesel Exhaust Fluid 326250 MT/Year #

(40 % Urea Solution) max b) Ammonia 4,01,500 MT/Year

c) Nano Fertilisers <sup>@</sup>- 100375 KL/Year \*\*

Nano-Nitrogen (Urea)/

Nano DAP /

Nano Micro Nutrients (Nano Zinc/ Nano Copper/ Nano Boron & Nano Sulphur)

(iv) Year of commissioning : Ammonia & Urea Plant - January, 1975

**Diesel Exhaust Fluid (DEF) Plant** 

- September, 2019

Nano Fertilisers Plant - I - August, 2021
Nano Fertilisers Plant - II - Under construction

(v) Date of the last environmental : 30/8/2022

Statement submitted.

# Depending upon the requirement of urea in the market, there shall be variation in quantity of DEF Production. However, total urea production shall be limited to 675000 MTPA (Max) under all the above combinations.

- \*\* Products shall be manufactured in any combination or single product in both plants i.e., Nano I & Nano II on demand basis. However, total capacity of plant will be limited to 100375 KLPA.
- @ Nano Urea contains 40000 ppm (Min) of nitrogen, Nano Zinc contains 10000 ppm (Min) of Zinc, Nano copper contains 8000 ppm (Min) of copper, Nano Boron contains 4500 ppm (Min) of Boron, Nano Sulphur contains 10000 ppm (Min) of Sulphur and Nano DAP contains 8 % of Nitrogen (Min) and 16 % of P2O5(Min).

Submission of Environmental Statement is in accordance with the provisions of Rule -14 of the Environment (Protection). Amendment Rule ,1993 of the Environment (Protection ) Act, 1986 (29 of 1986 ) published vide Notification dated 22-4-1993 G.S.R. 386 (E) in the gazette of India- Extraordinary part-II Section -3 Subsection (i), No.155 dated 28-4-1993 by the Ministry of Environment and Forests, Government of India; read with the Notification dated 13-3-1993 G.S.R. 329 (E), of the Gazette of India - Extraordinary part - II Section - 3 Subsection (i) No.120 dtd 13-3-1993.

"Every person carrying on an industry, operation or process requiring Consent under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section - 21 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) or both authorisation under the Hazardous Waste (Management and Handling) Rules, 1989 issued under the environment(Protection) Act, 1986 (29 of 1986) shall submit an environmental audit report for the financial year ending the 31st March in Form- V to the concerned State Pollution Control Board on or before the thirtieth day of September every year, beginning 1993.

### PART – B

### **Water and Raw material Consumption**

### (i) Average water Consumption m³/day during the year 2022 - 23

Process : 100
Cooling & Boiler feed : 9659
Domestic : 600

	Process water consumption per unit of product output			
Name of products	During the previous Financial year 2021 - 2022		During the current Financial year 2022 - 2023	
	CT make up	BF make up	CT make up	BF make up
(1) Ammonia	4.15 m <sup>3</sup>	2.66 m <sup>3</sup>	4.17 m <sup>3</sup>	2.48 m <sup>3</sup>
(2) Urea	1.04 m <sup>3</sup>	$0.56 \; \text{m}^3$	1.01 m <sup>3</sup>	$0.50 \; \text{m}^3$
Legend: CT : Cooling Tower BF : Boiler Feed				

### (ii) Raw material consumption

		Consumption of raw material  Per unit of output		
* Name of raw materials	Name of Product	During the previous	During the current	
		Financial Year	Financial Year	
		2021 - 2022	2022 - 2023	
Ammonia:				
(1) RLNG *	Ammonia	841.964 Sm <sup>3</sup>	821.250 Sm <sup>3</sup>	
<u>Urea:</u>				
(1) Ammonia	Urea	570.663 Kg	570.159 Kg	
(2) CO <sub>2</sub>	Urea	781.33 Kg	745.71 Kg	
(3) RLNG	Urea	86.99 Sm <sup>3</sup>	80.47 Sm <sup>3</sup>	
DEF (32.5%):				
(1) 80% Urea Solution	DEF (32.5%)	0.35425 MT	0.35425 MT	
(2) DM Water	DEF (32.5%)	2.831 m <sup>3</sup>	2.708 m <sup>3</sup>	

Industry may use codes, if disclosing details of raw material would violate contractual obligations, Otherwise all industries have to name the raw materials used.

Cont.. 3

<sup>\*</sup> Indicates both feed and fuel

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

Pollutants	Quantity of Pollutants discharged (m³ / day)#	Concentration of pollutant discharged (Mass/ volume)	Percentage of variation from Prescribed standards with reasons
(a) Water	1155 m³ /day	Please refer <b>Annexure - I</b>	Nil
(b) Air	-	Please refer <b>Annexure - I</b>	Nil

<sup>#</sup> There was no discharge of treated effluent outside the plant premises during the year 2022 - 23.

PART - D
HAZARDOUS WASTES
[As specified under Hazardous wastes [Management and Handling] Rules, 1989]

	Total quantity (Kg)		
Hazardous wastes	During the previous financial year 2021 - 22	During the current financial year 2022 - 23	
(a) From process		•	
Spent Catalyst (Generated in Ammonia plant)	1200	25000#	
2. Spent Carbon	3000	3000	
(b) From pollution control facilities			
1. ETP Sludge	10000	10000*	
2. Spent resin	28000	45000*	

<sup>#</sup> Action is being initiated for E-Auction through M/s M-Junction, Kolkata for sale of spent catalyst.

### PART - E (Solid waste)

		Total quan	tity (kg)
	Particulars	During the previous	During the current
		financial year	financial year
		2021 - 22	2022 - 23
(a)	From Process	No solid waste gener	rated from process
(b)	From pollution control facilities	NIL	NIL
(c)	<ol><li>Quantity recycled or reutilized within the unit</li></ol>	NA	NA
	(2) Sold	NA	NA
	(3) Disposed	NA	NA
NA	: Not applicable		
			Cont4

<sup>\*</sup> Action already initiated for disposal at TSDF site of M/s Ecocare Infrastructure Pvt.

### PART - F

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

Sr.	Type of Waste	Composition	Quantity	Disposal practice
No.			(MT)	
1.	ETP sludge	Ca & Mg Salt	41.66	Disposed off at TSDF Site of M/s Eco care
				Infrastructure Pvt Ltd.
2.	Spent Catalyst	Cu/Ni/Zn	Nil	Sell to registered and authorized recycler.
3.	Spent Carbon	Activated	Nil	Disposal at TSDF Site / Co-processing in
		Carbon		cement industries.
4.	Spent Resin		56.775	Disposed off at TSDF Site of M/s Eco care
				Infrastructure Pvt Ltd.
5.	Used or Spent Oil	-	5.520	Sold to registered and authorized refiners.
6.	Discarded	-	16.648	Sold to authorized decontamination facility.
	Drums/Barrels			
	(Plastic			
	Drums/Carboy)			

PART - G

### Impact of the pollution abatement measures taken on conservation of natural resource and the cost of production.

By implementation of pollution abatement, resource conservation and energy measures. there is reduction in specific energy consumption per MT of urea, reduction in raw water consumption and effluent generation, improvement in effluent quality, reduction in fuel consumption and there by overall improvement in the environment.

### Pollution abatement / Resource conservation measure implemented during the year 2022 - 23 are as below:

### 1) Urea Plant:

### Installation of Pre-flash vessel at Hydrolyser Section of Urea Plant

Hydrolyser system was installed considering urea plant capacity of 1200 MTPD in December, 1992. With increase in capacity of urea plant, operational limitations have been faced in the hydrolyser section at higher plant load. To improve the operational flexibility of Hydrolyser section, one pre-flash vessel with associated system has been installed at upstream of first desorber at Urea Plant. This has resulted in more ammonia recovery in atmospheric scrubber there by reducing ammonia loss.

### 2) Offsite Plant:

### New Screw air compressor in Inert Gas Plant at Offsite

7 Nos of Reciprocating type of Air Compressors have been installed for meeting the Plant Air/ Inert Gas requirement of the plant. Out of that, 5 Nos of Air Compressors were delivering the Plant/instrument air and rest 2 Nos of compressors were used for both Air and IG service requirement. Since these reciprocating compressors were very old and causing frequent operational & maintenance problems. Out of 7 compressors, 3 reciprocating compressors were replaced with 2 nos. of screw type rotary air compressor for maintenance and trouble free operation. This has resulted in yearly power saving of 216153 KWh. Cont.. 5

### 3) Installation for one continuous Ambient Air Quality Monitoring station (CAAQMS)

Continuous Ambient Air Quality Monitoring station (CAAQMS) of Thermofisher Make has been installed near Plant main gate and commissioned in January 2023 for monitoring of PM<sub>10</sub>, PM<sub>2.5</sub>, SOx, NOx and Ammonia in the ambient air. One LED display board has been installed outside the plant gate highlighting above said parameters along with specific parameters of ETP such as pH, Ammonical Nitrogen and Flow.

### 4) Solid waste Management at IFFCO - Kalol

As a part of effective Solid waste Management system at IFFCO-Kalol, Purchase order has already been issued to M/s Durogreen, Ahmedabad and following equipment have been delivered at site for conversion of canteen waste and horticulture waste into manure.

- Composting machine with curing chamber
- Crusher / Shredding machine for handling of horticulture waste

Work order has been issued to above said agency for man power supply to carry out jobs related to collection, segregation of waste and treatment of biodegradable waste and also for transportation of recyclable waste to the registered recyclers. Civil work related to construction of shed has already been started.

# Measures implemented towards renewable energy sources / Energy conservation during the year 2022 - 23.

### Towards renewable energy sources:

❖ About 1970.98 MW of power was generated by Solar energy during the year 2022 - 23 (equivalent to 642 MT of CO₂ emission reduction @ 0.7 kg CO₂/KWh).

### **Towards Energy conservation:**

### Plant:

- ❖ Replacement of normal motors with energy efficient motors in Urea & Product Handling plants as mentioned below:
  - P-1426, K-4402/3, M-1402 and M-2116/4
- ❖ Replacement of conventional light fittings with LED luminaries in purchase & F&A section.

### Township:

- Replacement of conventional light fittings with LED luminaries in street light & quarters.
- ❖ Replacement of conventional ceiling/exhaust fans with energy efficient fans in quarters and public buildings.

### PART - H

Additional investment proposal for the year 2023 - 24 towards environmental protection including abatement of Pollution / prevention of Pollution.

### **Urea Plant:**

### 1. Replacement of HP Stripper.

Existing HP Stripper is in operation since 2002 with tube MOC of SA-213M-UNS S31050 (2 RE69) and Shell MOC of CS. Due to aging and to improve the overall HP system performance it is planned for replacement of existing HP Stripper with improved design. Order has been issued to M/s L&T and it will be replaced during annual turn around 2024. This shall result improvement in CO<sub>2</sub> stripping efficiency.

### **Offsite Plant:**

### 1. Replacement of FD Fan turbine in BHEL Boiler at Offsite.

Existing M/s KKK Germany make FD fan turbine is very old and was installed in the Year 1982. It is proposed to replace this turbine with high efficient turbine of Kirloskar Make during annual turn around 2024 for which order has already been issued. This shall result in saving of 0.4 Ton/hr 60 at a steam.

### PART - I

### Any other particulars for improving the quality of the environment.

### Vermicompost at IFFCO township (Kasturinagar)

Domestic waste generated in township is segregated into biodegradable and non biodegradable waste. Bio-degradable materials of about 350 kg/day is converted into vermicompost using earthworms. The nutrient present in the vermicompost are readily soluble in water and thus are very rich sources of macro and micro nutrients. This vermicompost is used as manure in gardening / horticulture within township. Cartons and non biodegradable waste (such as plastic) are disposed off to recyclers.

### ❖ 500 m³/day capacity sewage treatment plant at Township

500 m³/day capacity Sewage Treatment Plant based on Fluidized Aerobic Biotechnology (FAB) has been installed at township Kasturinagar. Treated water is utilized for the gardening & nursery within the township.

### ❖ Rain water harvesting

In collaboration with Central Ground Water Board, water recharging well of 600 m<sup>3</sup> capacity has been installed for rain water harvesting at IFFCO Township. Almost total rainwater is collected in 700 m<sup>3</sup> capacity sumps and water is percolated in the soil through two tube wells provided. Also, "Rain water harvesting modules" of Approx. 25 m<sup>3</sup> capacity each have been installed at township and near Union office at plant site for harvesting the rain water. Apart from above 2 nos of rain water harvesting system of single module with internal volume of 0.8 cubic meter (fixed below the ground level) have been implemented at two different locations at township.

## ❖ Highlights of Environment / safety performance at IFFCO - Kalol for the year 2022 - 23

- a) IFFCO Kalol Unit has been awarded the FAI special award for Research and Development/ Innovation for Development of Liquid Nano Fertilizer for the year 2020-21.
- b) IFFCO Kalol Unit has been awarded Prestigious Sarvashrestha Suraksha Puraskar-2022 (Golden Trophy) in recognition of outstanding performance in Occupational Safety & Health (OSH) Management System for the assessment period of three years (2019 to 2021) under the category of Manufacturing sector.
- c) One employee has been declared the winner of the "Shram Ratna Award" by the ministry of labour, employment and skill development government of Gujarat.
- d) Longest accident free period of more than 11 years (4285 days from 9.7.2011 to 31.3.2023) was achieved surpassing the previous record of 2256 days.

### ❖ IMS for IFFCO Kalol Unit:

Surveillance audit of Integrated Management System (IMS) consisting of Quality Management System (ISO 9001:2015), Environment Management System (ISO 14001:2015) and Occupational Health and Safety Management System (ISO 45001:2018) was carried out by Bureau Veritas (India) Pvt Ltd during 9<sup>th</sup> & 10<sup>th</sup> May 2023 and the certificate is valid up to 4.4.2025.

### ❖ ISO 50001:2011 for IFFCO Kalol Unit:

Surveillance audit of Energy Management System (ISO 50001:2018) by the certifying agency considering new standard ISO 50001:2018 was carried out during 10th & 11<sup>th</sup> May 2023 at IFFCO-Kalol and the certificate is valid up to 21.3.2024.

### ❖ ISO 14001 & IGBC Rating for Township:

IFFCO Kalol township is certified for its Environment Management System (ISO 14001:2015) by Bureau Veritas (India) Pvt Ltd and the certification is valid up to 31.5.2025. Also, Kasturinagar is certified under Green Residential Society Rating System of Indian Green Building Council (IGBC), Hyderabad with Platinum category.

Date: 8/8/2023

(Signature of official carrying out an industry, operation or process)

(D. G. Inamdar)
Director, IFFCO Kalol







Annexure - I

Page 1 of 2

Liquid effluent : Final treated effluent

Location of sampling point: Outlet of Effluent Treatment Plant (ETP).

Report for the period : April - 2022 to March - 2023

Sr.No	Parameters	Unit	Permissible limit	Yearly Average Apr - 22 to Mar – 23
1	pH		6.5 to 8.5	6.6 - 8.4
2	Temperature	deg C	40	27
3	Colour (Pt.co. scale )	units	100	31
4	Suspended Solids	mg/l	100	25.3
5	Oil and Grease	mg/l	10	Traces
6	Fluorides	mg/l	2	0.7
7	Ammonical Nitrogen	mg/l	50	9.8
8	Total Chromium	mg/l	2	ND
9	Hexavelent Chromium	mg/l	0.1	ND
10	Copper	mg/l	3	0.04
11	Nickel	mg/l	3	ND
12	Zinc	mg/l	5	0.35
13	B.O.D (5 days at 20 ° C )	mg/l	30	23
14	C.O.D	mg/l	100	60
15	Chlorides	mg/l	600	390
16	Sulphates	mg/l	1000	80
17	Total dissolved Solids	mg/l	2100	925
18	Sodium absorption ratio	•	26	2.31
19	Free Ammonia	mg/l	5	0.45
20	Total Kjeldahl Nitrogen	mg/l	100	19.5
21	Nitrate (NO <sub>3</sub> –N)	mg/l	50	6.49
22	Sulphide	mg/l	2	ND
23	Bio Assay		90% survival of fish after 96 hrs in 100 % effluent	95% survival of fish after 96 hrs in 100 % effluent

Note: There was no discharge of treated effluent outside the plant premises during the year 2022 - 23.

ND: Not detectable







Annexure - I

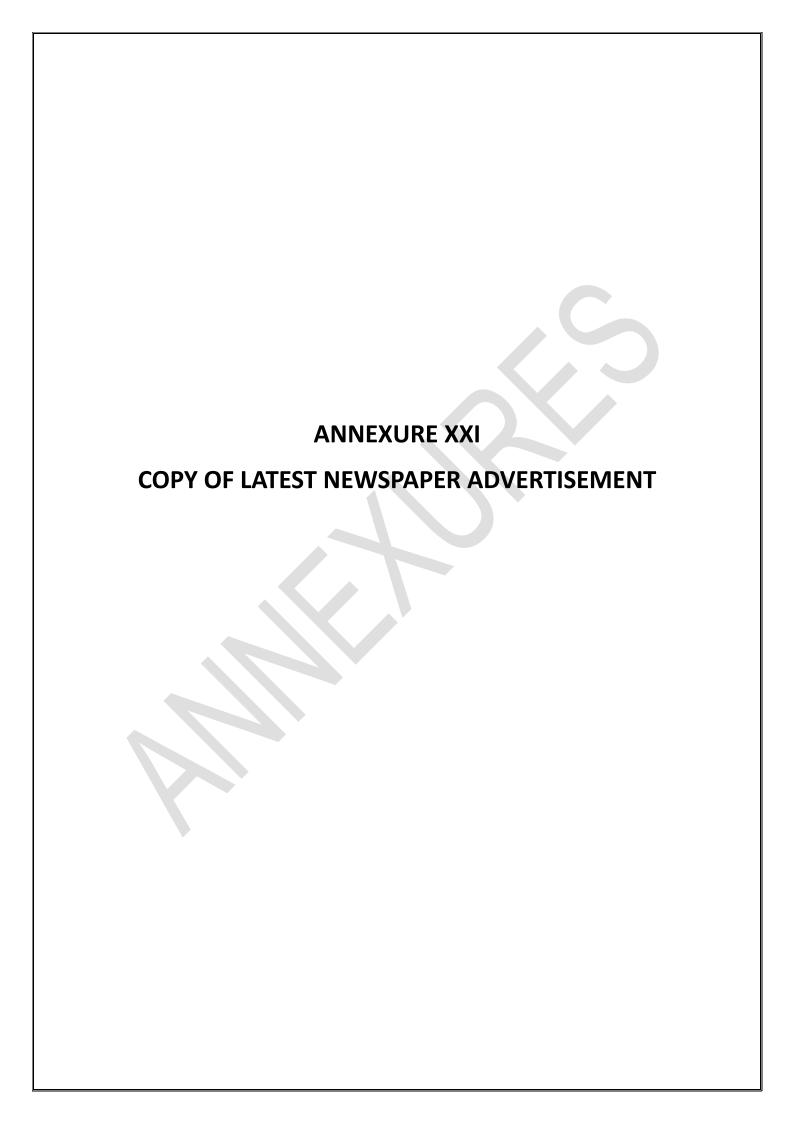
Page - 2 of 2

### STACK / PROCESS EMISSION ANALYSIS REPORT

### FOR THE PERIOD APRIL - 2022 to MARCH - 2023

### Analysis report of various emissions

Sr. No.	Emission points	Pollutant	Units	Concentration	GPCB Limit
1	Urea plant Prill tower exhaust	Particulate Matter	mg/Nm <sup>3</sup>	86	150
2	Ammonia scrubber in urea plant ( V- 1207 )	Ammonia ( gaseous )	mg/Nm³	52.5	175
3	Primary Reformer and auxiliary boiler furnace stack	PM SO <sub>x</sub> NO <sub>x</sub>	mg/Nm³ ppm ppm	21 2 19.6	150 100 50
4	Boiler ( BHEL )	PM SO <sub>x</sub> NO <sub>x</sub>	mg/Nm³ ppm ppm	16 1.7 17	150 100 50



TIMES LATION

tions and respond to Virupakshappa's plea. He was able to persuade the CJI-led bench for urgent listing and was permitted to mention it before a bench headed by Justice Sanjay K Kaul. But Justice Kaul posted the petition on Wednesday.

raid, in which the MLA's son, Prashanth Madal, was caught red-handed accepting a bribe of Rs 40 lakh by Lokayukta police. In the subsequent searches, the Lokavukta police had seized Rs 1.62 crore from Madal's office and an additional Rs 6.1 crore from his residence.

It also said that "the governor may as soon as possible after the presentation to him of the hill, return it if it is not a money bill together with a message requesting that the House or Houses will reconsider the bill or any specified provision thereof..."

### RECRUITMENT FOR NON-FACULTY POSITIONS

Indian Institute of Science Education and Research (IISER) Mohali, an Institute of National Importance, invites applications from suitable Indian nationals for appointment of various non-faculty vacant posts on regular basis. Last date for submission of application form is 04-04-2023 up to 05:30 PM.

For details regarding educational qualifications, experience, general conditions nestitute's website www.iisermohali.ac.in

mere any corrigendum/addendum/cancellation notice, it shall only on Institute's website.

Registrar

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केंद्रीय (अंग्रेज (अंग्रेज कंप्यूट

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**HC scraps rehiring of VCs** during Bengal govt spat with Dhankhar

Kolkata: The Calcutta HC struck down Tuesday the Bengal government's reappointment of VCs for 31 state-run universities during its two-year standoff with former governor and chancellor Jagdeep Dhankhar. The state had used the "removal of difficulty" clause in the state statutes to rehire the VCs and give extensions. The HC ruled that once the power "to reappoint or extend the tenure" was given to the chancellor, it "cannot be usurped by the state under removal of difficulty clause".



### ESI-PGIMSR & ESIC MEDICAL COLLEGE, JOKA (A statutory body under Ministry of Labour &

Employment, Govt. of India)

DIAMOND HARBOUR ROAD, JOKA KOLKATA-700104 PH. NO.: (033)/ 29500731 Email: deanpgi-joka.wb@esic.nlc.in

### Advt. No. 03 & 04 of 2023

ESI-PGIMSR & ESIC Medical College, Joka invites application for the post of Teaching Faculty & Part Time Specialist on Contractual Basis.

The details of advertisement No. 03 & 04 of 2023 dated 06.03.2023 & 09.03.2023 are available on the website www.esic.gov.in of ESI Corporation.

> Sd/-Dean



### INDIAN FARMERS FERTILISER COOPERATIVE LIMITED KALOL UNIT

Notification as per the directive of MOEF&CC (I.A.Division)

Sub: Environment Clearance for Expansion of existing fertiliser plant for manufacturing of Nano fertiliser and Nano micro nutrients at IFFCO-Kalol unit

Kalol Unit of Indian Farmers Fertiliser Cooperative Limited (IFFCO) has Ammonia-Urea and Nano Fertiliser Complex at Plot no. 712/846, 855, 856 of Saii, 17-37 of Dhanaj, P.O.: Kasturinagar, Kalol, District Gandhinagar, Guiarat. Project related to "Expansion of the existing Fertiliser Plant for manufacturing of Nano Fertilisers and Nano micronutrients" by IFFCO-Kalol Unit has been accorded Environmental Clearance vide Proposal number IA/GJ/IND3/412440/2022 dated 21" Feb 2023 and F.No.: J-11011/60/2009-IA-II(I) dated 7th March 2023 by the Ministry of Environment, Forest & Climate Change, Govt of India. Copies of the clearance letter are available with the SPCB/MoEF&CC and may also be seen at Website of the Ministry at https://parivesh.nic.in

D. G. Inamdar

Director (Kalol & Nano Fertiliser) IFFCO Kalol Unit, P.O. Kasturinagar, Dist: Gandhinagar, Gujarat - 382423 Phone: 079-23282005, 23282003



### NATIONAL BOARD OF EXAMINATIONS IN MEDICAL SCIENCES

(Autonomous body of the Mio. Health & Family Walfare, Boyt, of India) NAMS Building, Medical Enclave, Ansari Nagar, New Delhi - 110029

# भाशसाना जना

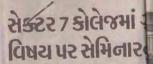


નાટક અકાદમીના આર્થિક ભાના સહયોગથી ઉષા યોજવામાં આવ્યો હતો. ારૂપે મહિલા ગાયકો દ્વારા ઘર આયી કે નન્હી પરી, તેરી ચુનરિયા લહેરાઇ

### ર્ટારઅપ એન્ડ ર્યક્રમ યોજાયો

सायन्स डोलेश जाते

ગાંધીનગર | ભારતની આઝાદીના 1930ના રોજ મહાત્મા ગાંધીએ વિરોધમાં સત્યાગ્રહ કર્યો હતો. જેન્ દ્વારા બાઇક રેલીનુ આયોજન કરાયુ કુટિર સુધી યોજવામાં આવી હતી.





ગાંધીનગર | 15 માર્ચ વિશ્વ ગ્રાહક આવ્યો હતો. જેમાં ત્યારે સેક્ટર 7 કોલેજમાં સ્વર્ધ મહેવાએ કમિટી દ્વારા સશક્તિકરણ વિષય પર સેમિ ન્ટરપ્રિન્યોરશિપ એન્ડ વોલેન્ટરીયસ અૃતિલ કક્કડ દ્વારા યુનિવર્સિટીના સીઇઓ આવી હતી.

# ધાનેરા પાલિકામાં સર્વર ડાઉન રહેતા

કલોલ | કલોલ ભાજપ પરીવાર દ્વારા વખારીયા સ્કૂલ ખાતે ગુજરાત માધ્યમિક અને ઉચ્ચતર માધ્યમિક શિક્ષણ બોર્ડ ધોરણ 10 અને 12 ની પરીક્ષા આપવા જઈ રહેલા તમામ ઊર્જાવાન પરીક્ષાર્થીઓને પેન તથા પુષ્પગુચ્છ આપી જ્વલંત સફળતા મેળવવા સ્નેહસભર શુભેચ્છાઓ પાઠવી તેમનો ઉત્સાહ વધાર્યો હતો.

### રાણપુર તાલુકાની નાની વાવડી ગામે નિ:શુલ્ક સર્વરોગ નિદાન કેમ્પ યોજાયો

બોટાદ | રાશપુર તાલુકાના નાની વાવડી ગામે સહકારી ગોડાઉનમાં મંડળીના ગ્રામ પંચાયત तेभक સહકારી ઉપક્રમ સંયુક્ત મંડળીના नि:शब्ड सर्व रोग निद्दान डेम्प યોજાયો હતો. જેમાં ડોક્ટર જયેશ અશીયાળીયા (BHMS) ડો. જયદીપ પંચાળા (BHMS) हाक्षर रह्या हता. લીંબડીની



હોમિયોપેથિક કોલેજના વિદ્યાર્થીઓને માર્ગદર્શન આપવામાં આવ્યું હતુ.

### દિવ્ય ભારકરને જ્યાવે

તમારા સમાજ- સંસ્થા, ધર્મ,સ્કૂલ, કોલેજ કે આસપાસ બનતી નાની-મોટી ઉજવણીઓને આ પેજ પર સમાવવા માટે નીચે આપેલા ઇ-મેઇલ કે વોટસએપ પર કોટો સાથે વિગત મોકલો.

### gnr.dbcommunities@gmail.com

પર મેઇલ કરો અથવા 9904928087 પર વોટ્સએપ કરો કે પછી નીચેના સરનામે મોકલી આપો.

માંધીનગર **બાર્ન અહિંમ** : બ્લોક નં. 14/1, ઘ ટાઇપ, સેક્ટર-22, ગાંધીનગર.

### ઉત્તર ગુજરાતના ગંજ બજારના ભાવ

to new name ACHARYA PRITIBEN PRASHANT 9510134357 อาเกษต 9574795213 ผลกัฐกาย์ 6351519310 พลิจากาย์

### જાહેર નોટીસ

ગાણસાંભા મે.વયુડીશીયલ મેલુન્ટ્રેટ ફર્સ્ટ કલારા સાહેબની કોર્ટમાં, મુ.ગાળસા અસ્પરાસ્ત્રા વિલાન વકિલની એર.એમ. પ્રતાવિ અસ્પરાસ: પ્રતાવી અમોકનાઈ વિક્લભાઈ, રહે.(ઉંમલપુરા (લક્સેડા), તા.માલસા, છું. ગોલીનગર વિરૂદ્ધ સમાવામા: ૧. તાલી કર્ય મીત્રીને, લાસ્ટ્રોડા, અમે પ્રયાસ કરી. તા.માલસ, છું. ગોલીનગર ૨. સાહાર્યની, સલકાંદ સ્ત્રુપ એફ એલિસ, સુન સલકું: મન્ની ન્યુક, યુ-સ્પાલાના, તા. મોલિયર

આજ રોજ તા.૧૦ મી માર્ક માર્ચ અને ૨૦૨૩ ના રોજ મારી સહી તથા કોર્ડનો લિક્કો કરીને લાગ્લો.

मुडामा करनार श्रीत प्रीत प्रीत संस्कृतिक

(

કે.બી.પરમાર રાજસ્ટર, પ્યાપ્તિક ક.ત.બે.પામ



### ઇન્ડિયન ફાર્મર્સ ફર્ટીલાઇઝર કો.ઓપરેટીવ લિમિટેડ ક્લોલ યુનિટ

MOEF&CC (I.A. Division) ના આદેશ અનુસાર સૂચના વિષય: ઇન્કો કલોલ યુનિટ ખાતે નેનો ખાતર અને નેનો સુરમ પોષક તત્વો ના ઉત્પાદન માટે હાલના ખાતર ના પ્લાન્ટ ના વિસ્તૃતીકરણ માટે પર્યાવરણ મંત્રી

ઇન્ડિયાન સ્મર્સિ ફર્સિવાઇઝર છો. એ. બિ.(IFFCO)ના કલોલ યુનિટ, પ્લોટ ને. 712/846, 855, 856-સર્વજ, 17-37 લાનજ, પોસ્ટ ઓફિસ-ક્સુરીનઝર, કલોલ, વિશ્લો ગાંધીનઝર, ગુજરાત ખાતે એમોનિયા-યુરીયા અને નેનો ફર્સિવાઇઝર કોમ્પ્લેય આવેલ છે. ઇન્ક્સે કલોલ યુનિટની "હાલના ખાતરના પ્લાન્ટ ની નેનો ખાતર તેમજ નેનો યુરમ પોયક તત્વો ના ઉત્પાદન માટે વિસ્તૃતીકરણ" સંબધિત પરિયોજના ને ભારત સરકાર ના પર્યાવરણ, વન અને આભોહવા પરિવર્તન મંત્રાલય ના પ્રસ્તાવ ને. IA/GJ/IND3/412440/2022 તારીખ રવ ફેબ્રુઆરી, ૨૦૨૩ તેમજ F. No.: J-11011/60/2009-IA-II(I) તારીખ હ માર્ચ ૨૦૨૩ હારા પર્યાવરણ મંત્ર્રી આપવામાં આવી છે. મંત્ર્રી પત્ર ની નક્સ SPCB/MoEF&CC પાસે ઉપલબ્ધ છે અને મંત્રલયની વેબલાઇટ https://parivesh.nic.in પર જોઈ શકાય છે.

डी. जु. ईजासहार डायरेंक्टर(क्वीय क्षजे नेनी भारतर) वंदको डवीय युक्तर, घे. कस्तुरीजगर, सि. आंधीनगर, 'गुण्यत-उटयपव होना क्षण-२३४८२००६, १३४८२००३

390 - 518

410 - 468

470

425-451

# માણસાના યુવકે સોશિયલ મીડિયા ગ્રૂપ બનાવી ગામની દીકરીઓના ફોટા મૂકી અભદ્ર લખાણ લખ્યુ

# ગ્રૂપમાં બિભત્સ વીડિયો ક્લિપ મુકી બદનામ કરનાર શખ્સ સામે પોલીસ ફરિયાદ કરાઈ

ભાસ્કર ન્યૂઝ | ગાંધીનગર

માણસા તાલુકાના છેવાડે આવેલા એક પરા વિસ્તારમાં રહેતા યુવક ફોટા સાથેની વિગત તેમણે વાંચી ફોટા સાથે બિભત્સ વીડિયો એક ગામના યુવક દ્વારા સોશિયલ દ્વારા મીડિયામાં ગ્રૂપ બનાવવામાં આવ્યુ સોશિયલ મીડિયા મારફતે જ ચોકી ઉછ્યા હતા. હતુ. જેમાં ગામની દીકરીઓના બદનામ કરવાનુ કૃત્ય કરવામાં તેમને ગણિકા આવ્યુ હતુ. પરા વિસ્તારનુ નામ સગીર વયની હતી. છતા તેમને હાથ્ ધરી હતી. બતાવવામાં આવી હતી અને સાથે લખીને યુવતીઓને ગણિકા બદનામ કરવાનુ કાવતરુ સાથે તેનો સમય અને ભાવ બતાવવામાં આવી હતી અને કરવામાં આવ્યુ હતુ. આ લખવામાં આવ્યો હતો. જ્યારે તેની સામે તેમનો ભાવ અને બનાવને લઇ યુવતીના સગાએ ગ્રૂપમાં સમાવેશ કરાતા ફોટા કેટલા સમયે મળશે તે ઉપરાંત પોલીસ મથકના દરવાજા યુવતીના પરિવારના સભ્ય દ્વારા એક બિભત્સ વીડિયો ક્લિપ પણ ખખડાવ્યા હતા. જેમાં ગ્રૂપ દેતા હોય છે. ત્યારે આવા જોવામાં આવતા ગ્રૂપમાં ફોટા ગ્રૂપમાં મુકવામાં આવી હતી. આ એડમિન અને ફોટા વાઇરલ લોકોએ બદનામ ના થવુ પડે તે મુકીને બદનામ કરનારા શખ્સ ગ્રૂપમાં એક જ પરિવારની ત્રણ કરીને બદનામ કરનાર ગામના માટે પરિવારના અને ખાસ કરીને સામે પોલીસ મથકમાં ગુનો યુવતીઓના ફોટા મુકવામાં જ વ્યક્તિ હોવાનુ સામે આવ્યુ મહિલાઓના ફોટા સોશિયલ નોંધવામાં આવ્યો હતો.

મળતી માહિતી મુજબ માણસા યુવતીના પરિવારના સભ્યનો સભ્યએ પોલીસ મથકમાં ફરિયાદ તાલુકાના છેવાડે આવેલા ગામના પણ સમાવેશ કરાયો હોવાથી નોંધાવતા ગામની યુવતીઓના ગામની યુવતીઓને હતી, જેમાં તેઓ વિગત વાંચતાં ક્લિપ મુકનાર આરોપી સામે

ગુનો નોંધાવતા ગ્રૂપમાં ત્રણ યુવતીઓમાંથી બે આરોપીને ઝડપી લેવા તજવીજ

સોશિયલ મીડિયા ઉપર કેટલાક તમામ ફોટા સહિત અપલોડ કરી આવ્યા હતા. જ્યારે ગ્રૂપમાં હતુ. જેથી યુવતીના પરિવારના મીડિયામાં ન મુકવા જોઇએ.

# ધાનેરા પાલિકામાં સર્વર ડાઉન રહેતા વેરો ભરવા આવનાર લોકોને હાલાકી આખા દિવસમાં માત્ર બે કલાકજ સર્વર ચાલુ રહે છે

**ભાસ્કર न्यूज** धानेरा

પાલિકામાં વેરામાં જે વ્યાજ

માફી આપવાની જાહેરાત સર્વર અવાર નવાર બંધ પડવાના કરવામાં આવતા પાલિકામાં વેરો ભરવા કતાર લાગે છે પરંતુ સર્વર લોકોને કલાકો સુધી બેસવુ પડી ડાઉન હોવાથી પાવતીઓ ના નિકળતા લોકો હેરાનગતી ભોગવી રહ્યા છે. ધાનેરા નગરપાલિકાના કરદાતાઓને જાણ કરવામાં આવેલ કે સરકાર દ્વારા વર્ષના તમામ પ્રકારના વેરાની બાકી રકમ તા. 31 માર્ચ સુધી ભરપાઇ કરે તો તેમને નોટીસ પામી છે અને આ બાબતે અમાં ફી, વ્યાજ અને પેનલ્ટી વોરંટ ફી એ ઉપરી કચેરી ખાતે પણ પેટેની 100% રકમ માફ કરવાની વારવાર રજુઆતો પણ કરવામાં જોગવાઇ રાખવામાં આવતા આવી છે.

બાકીદારો પોતાના વેરા ભરવા માટે નગરપાલિકામાં પહાંચી રહ્યા છે. પરંતુ નગરપાલિકા લગાવેલ હોય તે તમામ વળતર દ્વારા પાવતીઓ બનાવવામાં લીધે વેરો ભરવા આવનાર એરંડા

બાજરી

એરંડા

આ બાબતે નગરપાલિકામાં વેરા વિભાગના અધિકારીને પુછતા જણાવેલ કે આ બધી પ્રક્રિયા ઓનલાઇન હોવાથી આ સીસ્ટમનું તમામ નાશાકિય વર્ષમાં અગાઉના ગાંધીનગર ખાતે છે અને સર્વર અવાર નવાર બંધ થવાના કારણે આ સમસ્યા ઉભી થવા

# ઉત્તર ગુજરાતના ગંજ બજારના ભાવ

1811	એરંડા 1230 - 1287	
410 - 488	મગફળી 1300 - 1438	ઉનાવા
345	કપાસ 1450 - 1611	કપાસ 1251 - 1585
1200 - 1277	<b>ध</b> ઉ 400 - 542	એરંડા 1212 - 1280
851 - 1128	જુવાર 915 - 1423	રાયડો 900 - 1031
1031	ગવાર 1049	બહેત્રકાઢી
1151 - 1344	શણ 1472	ध3ं 402 - 425
1875	ચશા 861 - 900	तुवर 1150 - 1400
1650 - 2247	કુકરવાડા	રાયડો 950 - 890
	રાયડો 925 - 1008	એરંડા 1265 - 1280
ડર્ટામ સાક માર્ગ	એરંડા 1220 - 1282	
400 - 1000	કપાસ 1300 - 1578	જીરૂ 3375 વરીયાળી 2891
500 - 600	<b>ସ</b> ଓ 490 - 609	સવા 1445
30 - 200	મેથી 1149	બીટી કપાસ
1800 - 2200	રાજગરો 1441 - 1525	1352 - 1451
40 - 1200	ગોજારીયા	The second secon
150 - 280	The state of the s	ઊંઝા
40 - 300	રાયડો 800 - 980	<b>জ</b>
200 - 400	એરંડા 1230 - 1260	વરીયાળી 2525-5800
60 - 400	કપાસ 1500 - 1564	ઇસબગુલ
30 - 400	બાજરી 1500 - 1564	2941 - 3538
50 - 180	બાજરી 485	રાયડો 986 - 1121
550 - 600	<b>ध</b> ઉं 435 - 511	સવા 1711 - 2031
700 - 1300	વિજાપુર શાક માર્કેટ	અજમો 1400 - 2801
400 040	412141	wire.

880 - 976 50 - 200 प्रांतिश 500 - 960 એરંડા 1210 - 1245 410 - 465 80 - 120

બાજરી 390 - 440 320 - 385 पालनपुर 200 - 390 425-526 જુવાર 1538-1562 બાજરી 451-477 865-906

420 - 549 એરંડા 1260-1280 350 - 440 900-1014 રાયડો 1700 - 1750 વરીયાળી 2200-4000 1080 રાજગરો 1200-1680 441-470 910 - 961 દિયોદર 1000 - 1301

એરંડા 1275-1281 રાયડો 900-1005 915 - 970 બાજરી 500-555 ર.બાજરી 490-570 891 - 1211 450-550 5500-6725 રાજગરો 1450-1625 **GSOILH** 

### तुवर 1150 - 1400 અજમો એરંડા 1265 - 1280 વરીયાળી બટાકા બીટી કપાસ BixI 3 4825 - 7070 વરીયાળી 2525-5800 ઇસબગુલ રાયડો 986 - 1121 રીંગણ કારેલાં સવા 1711 - 2031 અજમો 1400 - 2801 લસણ મોડાસા 100 - 240 બટાકા 150 - 460 કુલાવર 50 - 300 કોબીજ 30 - 140 800 - 1600 રવેયા 50 - 280 200 - 440 એરંડા 900 - 1266 200 - 840 100 - 400 રાયડો 900 - 1022 100 - 210 1100 - 1420 સોયાબીન 950 - 985 200 - 900 વાલોર - 3230 500 - 700 40 - 900 ભીંડા 400 - 1400 200 - 260 100 - 800 કોથમીર સરગવો 100 - 210 આંબલિયાસણ સેન્ડો રવૈયા 360 - 495 એરંડા 1249 - 1258 સફેદ ભટ્ટા 50 - 150 947 - 992 ગવાર વિસનગર વરીયાળી 2900-3915 410 - 521

ગવાર तुवर 1161 - 1441 એરંડા 1260 - 1301 રાયડો અસાળીયો કપાસ 1301 - 1534

મેથી 1136 - 1229 જોટાણા

એરડા 1245 - 1259 908 - 998

### બાજરી રાયડો 850 - 1012 લાલ મરચાં 772-1116

# ધર્મ-સમાજ-સંસ્થા

# સેક્ટર-22માં દિવ્યાંગ સમૂહ લગ્નોત્સવમાં 10નવ યુગલે પ્રભુતામાં પગલાં પાડ્યાં



ગાંધીનગર ! સેક્ટર-22 રંગમંચ ખાતે લાયન્સ કલબ ઓફ ગાંધીનગર ફેમિના અને એસોસિએશન ફોર સોશિયલ વેલફેર એન્ડ ડેવલપમેન્ટ દ્વારા દિવ્યાંગ સમૂહ લગ્નોત્સવનું આયોજન કરાયું હતું. જેમાં 10 જેટલા નવયુગલોએ પ્રભુતામાં પગલાં માંક્યા હતા. આ પ્રસંગે મેયર હિતેશ મકવાણા, ઉત્તરના ધારાસભ્ય રીટાબેન પટેલ, માણસાના ધારાસભ્ય જે.એસ.પટેલ, સંસ્થાના આગેવાનો તેમજ મોટી સંખ્યામાં લોકો ઉપસ્થિત રહ્યા હતા. આ અવસરે મેયરે એકમેકના સંગાથ અને જીવનભરના વિશ્વાસના પવિત્ર લગ્નસંબંધને વધાવીને નવયુગલોને સુખી લગ્ન જીવનની શુભકામનાઓ પાઠવી હતી.

# સહજાનંદ સ્કૂલ ઓફ એચિવર વાર્ષિકોત્સવમાં નાટક અને સાંસ્કૃતિક કાર્યક્રમો યોજાયા



ગાંધીનગર | સહજાનંદ સ્કૂલ ઓફ એચિવરનો વાર્ષિકોત્સવનો કાર્યક્રમ તાજેતરમાં યોજવામાં આવ્યો હતો. જેમાં કેજીથી ધોરણ-9ના પ્રથમ ત્રણ ક્રમ હાંસલ કરેલા, ધોરણ-10માં એ1 અને એ2 ગ્રેડ મેળવનાર વિદ્યાર્થીઓને ઇનામ અપાયા હતા. ઉપરાંત વિદ્યાર્થીઓ દ્વારા ગરબા, નૃત્ય અને નાટક સહિતના સાંસ્કૃતિક કાર્યક્રમો રજુ કર્યા હતા. વધુમાં ટ્રાફિકના નિયમોને જાણકારી આપતું નાટક વિદ્યાર્થીઓએ રજુ કર્યું હતું.

# મીઠા પર લગાવેલા ટેક્સ કાયદાની યાદમાં બાઇક રેલીનું આયોજન કરાયું



ગાંધીનગર | ભારતની આઝાદીના ચળવળની મહત્વની ઘટના 12 માર્ચ 1930ના રોજ મહાત્મા ગાંધીએ મીઠા પર લગાવેલા ટેક્ષના કાયદાના વિરોધમાં સત્યાગ્રહ કર્યો હતો. જેની યાદગીરી રૂપે દાંડી કુટિર સંગ્રહાલય દ્વારા બાઇક રેલીનુ આયોજન કરાયું હતું. રેલી સાબરમતિ આશ્રમથી દાંડી કુટિર સુધી યોજવામાં આવી હતી.

# સેક્ટર 7 કોલેજમાં ગ્રાહક સશક્તીકરણ વિષય પર સેમિનારનું આયોજન કરાયું



ગાંધીનગર | 15 માર્ચ વિશ્વ ગ્રાહક અધિકાર તરીકે મનાવવામાં આવે છે. ત્યારે સેક્ટર 7 કોલેજમાં સ્વચ્છ ઊર્જા સંક્રમણો દ્વારા ગ્રાહકોને સશક્તિકરણ વિષય પર સેમિનાર યોજાયો હતો. જેમાં લીગલ વોલેન્ટરીયસ અનિલ કક્કડ દ્વારા વિદ્યાર્થીનીઓને માહિતી પુરી પાડવામાં આવી હતી.

સેક્ટર-23ની એ. એ. કોમર્સ કોલેજનો વાર્ષિકોત્સવ અને વિદાય સમારંભ યોજાયો



ગાંધીનગર ! નગરની એ એ કોમર્સ કોલેજ, સેક્ટર-23નો વાર્ષિકોત્સવ અને ટીવાયબીકોમના વિદ્યાર્થીઓનો વિદાય સમારોહનો કાર્યક્રમ યોજવામાં આવ્યો હતો. જેમાં વિદ્યાર્થીઓએ વિવિધ સાંસ્કૃતિક કાર્યક્રમો રજુ કર્યા ઉપરાંત બેસ્ટ ગ્લીટરીંગ સ્ટાર્સ, બેસ્ટ રીસર્ચ પેપર, બેસ્ટ વોલનેટીઅર અને સ્પોર્ટ્સ તેમજ એનએસએસમાં ઉજ્જવળ દેખાવ બદલ વિદ્યાર્થીઓને ટ્રોફી અને મેડલ આપ્યા હતા.

# માણસા તાલુકાના પુરવઠા વિભાગ દ્વારા કેમ્પનું આયોજન કરવામાં આવ્યું



માણસા માણસા તાલુકાના ચાંદીસણા,આમજા, ધેધુ,નાદરીમાં જિલ્લા પુરવઠા અધિકારીના માર્ગદર્શન હેઠળ માણસા પુરવઠા વિભાગ દ્વારા એનએકએસએ અંતર્ગત રાષ્ટ્રીય અન્ન સલામતી કાયદો 2013 હેઠળ નાયબ મામલતદાર પુરવઠાની ટીમ દ્વારા કેમ્પનું આયોજન કરવામાં આવ્યું હતું જેમાં અધિકારી દ્વારા નાગરિકોને કાયદા વિશે સમજ આપી હતી જેમાં ગ્રામજનોનો સારો પ્રતિસાદ મળ્યો હતો.

# સોજા કેન્દ્રે શાંતિપૂર્ણ માહોલમાં પરીક્ષાનો પ્રારંભ



માણસા માણસા તાલુકાના સોજાની શેઠ એચ. એમ.સાર્વજનિક હાઈસ્કૂલ ખાતે અત્યંત શાંતિપૂર્શ રીતે એસ.એસ.સી બોર્ડ પરીક્ષાનો પ્રારંભ થયો હતો. સોજા હાઈસ્કૂલ સહિત આસપાસની શાળાના સાડા પાંચસોથી પણ વધુ પરીક્ષાર્થીઓ કેન્દ્રમાંથી પરીક્ષા આપી રહ્યાં છે. કેન્દ્ર સંચાલક,શિક્ષકો અને અગ્રણીઓ દ્વારા તમામ બાળકોને પુષ્પ અર્પણ કરી આવકારી સાકરથી ગળ્યું મોં કરાવી શુભેચ્છાઓ પાઠવી આપવામાં આવી હતી. માતૃભાષા ગુજરાતીનું આજનું પ્રશ્નપત્ર બાળકો માટે એકંદરે સહજ-સરળ-સહેલું રહ્યું હતું.

# ઉદ્વગમ સંસ્થાનો ઉષા પર્વ-3 જો ઉદ્વગમ સુરોત્સવનો કાર્યક્રમ યોજવામાં આવ્યો



ગાંધીનગર ! ઉદ્દગમ ચેરીટેબલ ટ્રસ્ટ દ્વારા આઝાદીકા અમૃત મહોત્સવ અંતર્ગત ગુજરાત રાજ્ય સંગીત નાટક અકાદમીના આર્થિક સહયોગથી અને ગાંધીનગર સાહિત્ય સભાના સહયોગથી ઉષા પર્વ-3 જો ઉદ્દગમ સૂરોત્સવનો કાર્યક્રમ યોજવામાં આવ્યો હતો. જેમાં સંસ્થાના 25 વર્ષની ઉજવણીના ભાગરૂપે મહિલા ગાયકો દ્વારા દુર્ગા સ્તુતિ, ધન્ય ધન્ય નારી જીવન, મેરે ઘર આયી કે નન્હી પરી, માડી તારૂ કંકુ ખર્યુને સુરજ ઉગ્યો, માઇ તેરી ચુનરિયા લહેરાઇ સહિતના ગીતો રજુ કર્યા હતા.

# સરકારી કોલેજ ખાતે સ્ટૂડન્ટ સ્ટાર્ટઅપ એન્ડ ઈનોવેશનની જાણકારીનો કાર્યક્રમ યોજાયો













તાજેતરમાં સ્ટ્રુડન્ટ સ્ટાર્ટઅપ એન્ડ ઇનોવેશન પોલીસીની જાણકારી આપતો કાર્યક્રમ તાજેતરમાં યોજવામાં આવ્યો હતો. જેમાં એસએસઆઇપી ઇનોવેશન અને યુડીઆઇએસએચએ કમિટી દ્વારા યોજાયેલા કાર્યક્રમમાં એમ્પ્લોયેબિલિટી શ્રુ એન્ટરપ્રિન્યોરશિપ એન્ડ ઇનોવેશન ઉપર જાણકારી ગુજરાત ટેકનોલોજી યુનિવર્સિટીના સીઇઓ ડો.મહેન્દ્ર ચોધરી દ્વારા આપવામાં આવી હતી.

# કલોલ ભાજપ પરિવાર દ્વારા બોર્ડના વિદ્યાર્થીઓને શુભેચ્છા પાઠવાઈ



કલોલ | કલોલ ભાજપ પરીવાર દ્વારા વખારીયા સ્કૂલ ખાતે ગુજરાત માધ્યમિક અને ઉચ્ચતર માધ્યમિક શિક્ષણ બોર્ડ ધોરણ 10 અને 12 ની પરીક્ષા આપવા જઈ રહેલા તમામ ઊર્જાવાન પરીક્ષાર્થીઓને પેન તથા પુષ્પગુચ્છ આપી જ્વલંત સફળતા મેળવવા સ્નેહસભર શુભેચ્છાઓ પાઠવી તેમનો ઉત્સાહ વધાર્યો હતો.

# રાણપુર તાલુકાની નાની વાવડી ગામે નિ:શુલ્ક સર્વરોગ નિદાન કેમ્પ યોજાયો

બોટાદ | રાશપુર તાલુકાના નાની વાવડી ગામે સહકારી મંડળીના ગોડાઉનમાં સહકારી પંચાયત તેમજ ઉપક્રમે મંડળીના સંયુક્ત નિ:શુલ્ક સર્વ રોગ નિદાન કેમ્પ યોજાયો હતો. જેમાં ડોક્ટર જયેશ અણીયાળીયા (BHMS) પંચાળા ડો. જયદીપ હાજર રહ્યા હતા. લીંબડીની



કોલેજના હોમિયોપેથિક માર્ગદર્શન વિદ્યાર્થીઓને આપવામાં આવ્યું હતુ.

# દિવ્ય ભાસ્કરને જણાવો

તમારા સમાજ- સંસ્થા, ધર્મ,સ્કૂલ, કોલેજ કે આસપાસ બનતી નાની-મોટી ઉજવણીઓને આ પેજ પર સમાવવા માટે નીચે આપેલા ઇ-મેઇલ

### કે વોટ્સએપ પર ફોટો સાથે વિગત મોકલો. gnr.dbcommunities@gmail.com

પર મેઇલ કરો અથવા 9904928087 પર વોટ્સએપ કરો કે પછી નીચેના સરનામે મોકલી આપો. ગાંધીનગર બ્યૂરો ઓફિસ : બ્લોક નં. 14/1, ઘ ટાઇપ, સેક્ટર-22, ગાંધીનગર.

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# અવસાન નોંધ

જુવાર 1100 - 1595

380 - 492

850 - 893

921 - 1105

890 - 1201

950 - 1211

એરંડા 1211 - 1282

રાજગરો 1300 - 1526

કપાસ 1300 - 1602

1251

1890

1265

બાજરી

મગ

રાયડો

અસાળીયો

વિજાપુર

સોલંકી : ભલાજી જવાનજી સોલંકી (ઉ.વ.60) ડભોડા, ગાંધીનગર ઠાકોર : કમળાબેન ઠાકોર (ઉ.વ.50) બાબુજી હાલીસા, ગાંધીનગર : સુલોચનાબેન પરમાર

વિનોદચંદ્ર પરમાર (ઉ.વ.57) મોટા ચિલોડા, ગાંધીનગર

Change of name My old name was ACHARYA PRITI PRASHNT to new name

ACHARYA PRITIBEN PRASHANT Resi: Plot No.435/A/2, Sec-6/A, Gandhinagar.

# સેનમા દિપક મહેશભાઇ

ता.09/03/२०२३ने બુધવારના રોજ કલોલમાં થી ગુમ થયેલ છે.જે કોઇને ભાળ મળેતો નીચેના નંબર પર જાણ કરવા વિનંતી

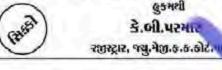
9723165607 ผลสผเย 9510134357 રમેશભાઇ 9574795213 มลางคาย์ 6351519310 ผลิยเคเย์

માણસાના મે.જયુડીશીયલ મેજીસ્ટ્રેટ ફર્સ્ટ ક્લાસ સાહેબની કોર્ટમાં, મુ.માણસા અગ્જદારના વિદવાન વકિલશ્રી એય.એમ. પ્રજાપતિ કિમીનલ પરયુરણ અરજ ને.૭૫/૨૦૨૩ અરજદારના વિધ્વાન વક્લિશ્રી એય.એમ. પ્રજાપતિ કિમીનલ પરયુરણ અરજ ને.૭૫/૨૦૨૩ અરજદારઃ- પ્રજાપતિ અશોકભાઇ વિહલભાઇ, રહે.હિંમતપુરા(લાકરોડા), તા.માણસા, જી.ગાંદીનગર વિરૂધ્ધ સામાવાળાઃ- ૧. તલાટી ક્રમ મંત્રીશ્રી, લાકરોડા, ગ્રામ પંચાયત કરેરી, તા.માણસા, જી.ગાંધીનગર. ર. આસાર્યશ્રી, સહજાનંદ સ્કુલ ઓફ એચીવર, સ્કુલ સરનામું:- ખ-૦ની નજીક, મુ.સરગાસણ,તા.જી.ગાંધીનગર.

વિષય:- જન્મ/મરણ અદિનિયમની ક્લમ-૧૩(૩) ૧૦(૩) મુજબની નોંધ કરાવવા બાબત. આશી જાહેર જનતાને આ નોટીસથી જણાવવામાં આવે છે કે અરજદારના પુત્ર હર્ષ અશોકભાઈ પ્રજાપતિ, રહે.હિંમતપુરા(લાકરોડા), તા.માણસા, જી.ગાંધીનગરની જન્મ તારીખઃ-૦૨/૦૩/૨૦૦૩ના રોજ હિંમતપુરા મુકામે થયેલ હોઇ તે મુજબનો જન્મનો દાખલો લેવા સારૂ અત્રેની કોર્ટમાં કિમીનલ પરચુરણ અરજ નં. ૭૫/૨૩ થી દાખલ કરેલ હોઇ જે કોઇપણ ઇસમને જન્મનો દાખલો આપવા સામે વાંધો કે હરકત હોય તો તેઓશ્રીએ જાતે અથવા તેમના માહિતગાર વકીલથી મારફતે અત્રેની કોર્ટમાં દિન -3૦ માં રજૂ કરવાના રહેશે. જો કોઈપણ ઈસમના વાંઘા કે હરકત રજુ નહી થાય તો આગળનો હુકમ કરવામાં આવશે જેની નોઇ લેવી.

આજ રોજ તા 10 મી માહે માર્ચ સને ૨૦૨૩ ના રોજ મારી સહી તથા કોર્ટનો સિક્કો કરીને આપ્યો. પી.બી પટેલ કે.બી.પરમાર





# IFFCO

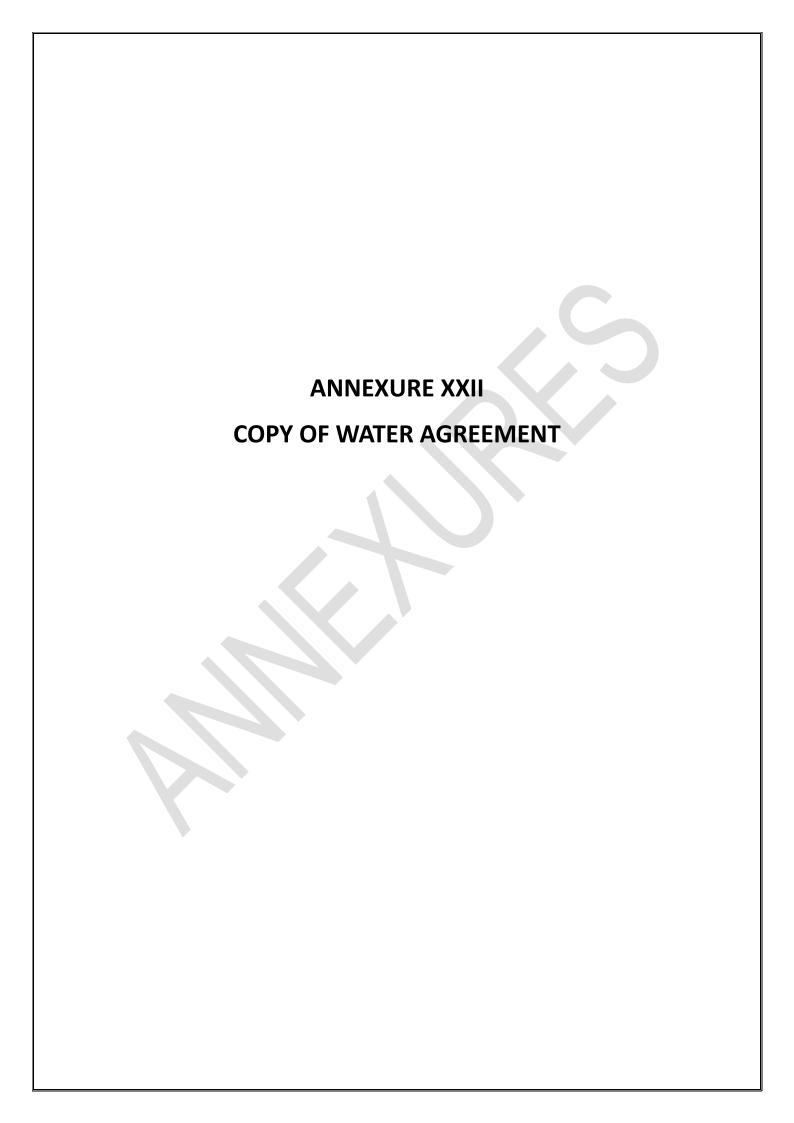
ઈન્ડિયન ફાર્મર્સ ફર્ટીલાઈઝર કો.ઓપરેટીવ લિમિટેડ ક્લોલ યુનિટ

MOEF&CC (I.A. Division) ના આદેશ અનુસાર સૂચના

विषयः र्रङ्डो ड्लोल युनिट जाते नेनो जातर अने नेनो सुक्ष्म पोषड तत्वो ना ઉत्पाहन मारे हासना भातर ना प्यान्ट ना विस्तृतीङरण मारे पर्यावरण मंशूरी ઈન્ડિયન ફાર્મર્સ ફર્ટીલાઈઝર કો. ઓ. લિ.(IFFCO)ના કલોલ યુનિટ, પ્લોટ નં. 712/846, 855, 856-સર્ઘજ, 17-37 ધાનજ, પોસ્ટ ઓફિસ-કરતુરીનગર, કલોલ, જિલ્લો ગાંધીનગર, ગુજરાત ખાતે એમોનિયા-યુરીયા અને નેનો ફર્ટીલાઈઝર કોમ્પ્લેક્ષ આવેલ છે. ઈફકો ક્લોલ યુનિટની "ઢાલના ખાતરના પ્લાન્ટ ની નેનો ખાતર તેમજ નેનો સુક્ષ્મ પોષક તત્વો ના ઉત્પાદન માટે વિસ્તૃતીકરણ" સંબધિત પરિયોજના ને ભારત સરકાર ના પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલય ના પ્રસ્તાવ નં. IA/GJ/IND3/412440/2022 તારીખ ૨૧ ફેબ્રુઆરી, ૨૦૨૩ તેમજ F. No.: J-11011/60/2009-IA-II(I) તારીખ હ માર્ચ ૨૦૨૩ દ્વારા પર્યાવરણ મંજૂરી આપવામાં આવી છે. મંજૂરી પત્ર ની નકલ SPCB/MoEF&CC પાસે ઉપલબ્ધ છે અને

મંત્રાલચની વેબલાઈટ https://parivesh.nic.in પર જોઈ શકાય છે. ડી.જી.ઇનામદાર डायरेड्टर(इबोब અने नेनो पातर) ઈફકો ક્લોલ યુનિટ, પો. કરતુરીનગર, જિ. ગાંધીનગર, ગુજરાત-૩૮૨૪૨૩

€)d: 06€-535€500€, 535€5003



CONTRACT

for

Water Supply

from

Narmada Branch Canal

Gujarat, India

### BETWEEN

Sardar Sarovar Narmada Nigam Ltd.

&

"Indian Farmers Fertiliser Cooperative Ltd (IFFCO)"
Kalol Unit

Contract NO .:		

### Sardar Sarovar Narmada Nigam Ltd.

Block 12, New Sachinvalay, Sector 10, Gandhinagar - 382 010, Gujarat, India Phone No +91-79-23252452 Fax No +91-79-23223056

February 2016







### TABLE OF CONTENTS

### Preamble

### SCHEDULES:

SCHEDULE "A" - Contract

SCHEDULE "B" - Layout and Company Scope of Work (With specifications of

pipelines, pumps, etc)

### ATTACHMENTS:

Annex A: Performance Guarantee proforma

Annex B: Copy Approval / Grant of Permission to draw water

Annex C: No Gift Representation





MY TIGHT

Page 2 of 34



गुअरात गुजरात GUJARAT

AH 125812

Purchaser Signature K. S. Vaghels Navigar Racin. N. S. 342 721.

### AGREEMENT

Agreement for sale of water to "Indian Farmers Fertiliser Cooperative Ltd (IFFCO)"
Kalol Unit by drawl from Dholka Branch Canal at Ch. 140m for Industrial Use.

### RECITALS:

This Water Sale Agreement (hereinafter referred to as "Contract / Agreement") is made and entered into this 2.2 day of February, 2016

### Between

(1) Sardar Sarovar Narmada Nigam Ltd. (SSNNL), a Company incorporated under the Companies Act, 1956 with its office at Block 12, 1<sup>st</sup> Floor, New Sachivalaya, Sector-10, Gandhinagar – 382 010, Gujarat, India (hereinafter referred to as "SSNNL / Seller"), which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns) of the One Part.

and





3 Bysame

(2) "Indian Farmers Fertiliser Cooperative Ltd (IFFCO)" Kalol Unit ( Address: P.O. Kasturinagar, Dist. Gandhinagar, Pincode-382423, North Gujarat), a Multi State Cooperative Society functioning under the provisions of the Multi State Cooperative Societies Act, 2002 and having its registered office at IFFCO Sadan, C-1, District centre, Saket Place, New Delhi-110017 (hereinafter referred to as "Company") which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns) of the Second Part.

### WHEREAS.

- (a) SSNNL has set up a about 458 km long Narmada Main Canal to transport water from the Sardar Sarovar Dam to various areas in Gujarat and has also set up a network of canal consisting of about 38 branch canals off-taking from different locations from the main canal and
- (b) SSNNL further desires to sell the water transported through this branch canal to various industrial consumers for their industrial requirement
- (c) The company engaged in the business of Fertiliser manufacturing represents that it has industrial requirement of water and has applied for renewal of agreement permission (letter No: TM/02/1400 dated 04-01-2016) to draw water from Narmada Canal from HR @ Ch 140 m of Dholka Branch canal for the purpose of Industrial use in its existing Plant at Kalol (Address: P.O. Kasturinagar, Dist: Gandhinagar, Pincode-382423, North Gujarat), and
  - (d) The company represents that it is well equipped to efficiently draw water from the Dholka branch canal, store and use it for its operations and is ready, willing and able to purchase and pay for the water drawn from the canal, as defined below.
  - (e) SSNNL has under its sanction letter No: SSNNL/IND/1204/27/IFFCO/WMC of 2016 dated 04-02-2016 agreed to grant such permission as applied for by the Company on the terms and conditions mentioned in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter provided, the Parties hereby agree as follows:

- SSNNL agrees to sell water in accordance with the terms and conditions of this Agreement and, in consideration of sale of water, the Company agrees to pay the SSNNL according to the terms and conditions herein contained.
- 2. The Agreement shall comprise of all the sections, exhibits, annexure attachments, Minutes of Meetings, LOI, all of which are annexed to this Contract / agreement.

The Contract shall be deemed to be effective from 23-02-2016 and shall be valid. upto 22-02-2026. क्षेत्र हो। बाग र Salsance

**IFFCO** 



In WITNESS WHEREOF, the Parties hereunder have caused this Agreement to be executed in duplicate, originals in their respective Corporate names by their respective officers thereunto duly authorized as of the date and year stated above.

Executed for and on behalf of

Executed for and on behalf of

Sardar Sarovar Narmada Nigam Ltd.

"Indian Farmers Fertiliser Cooperative Ltd (IFFCO)"

> IFFCO कलोल-इकार्ड

R.C. Vasava Executive Engineer N.P. Canal Dn.No.8, Dholka Shamsher Singh Executive Director IFFCO Kalol Unit

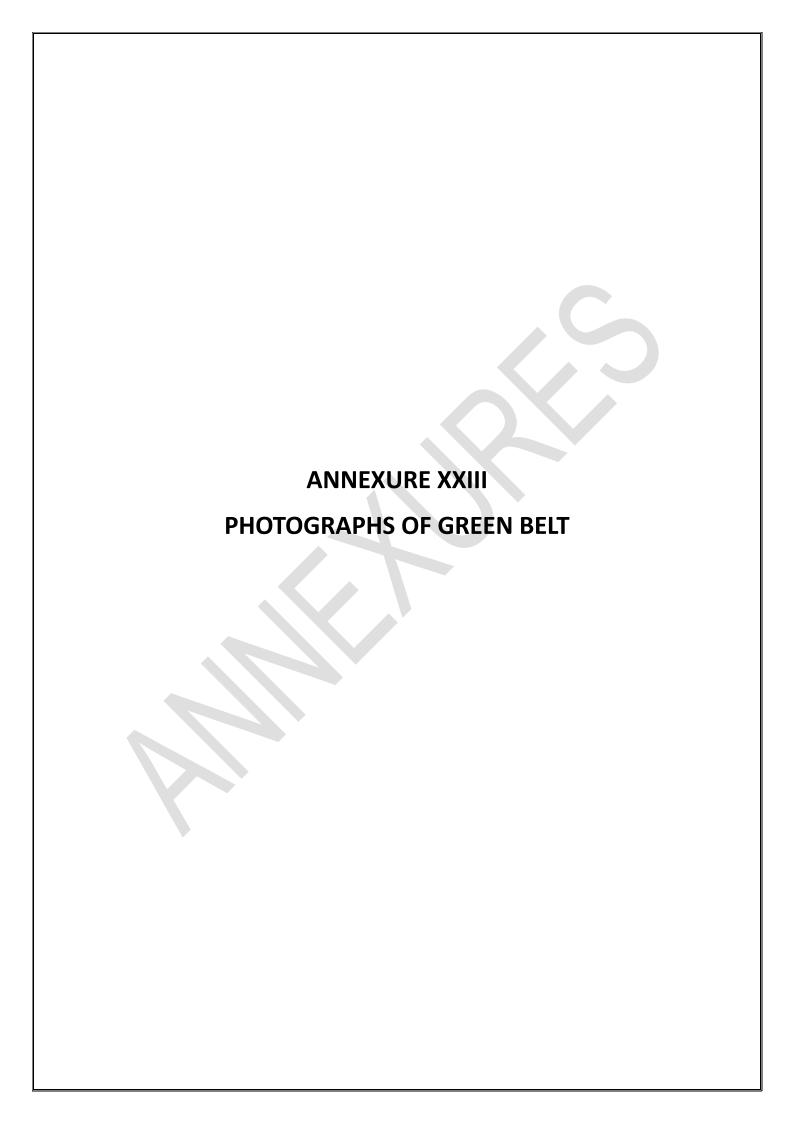
Date

Date: 22 21216

Witness:

Witness

H S Portel



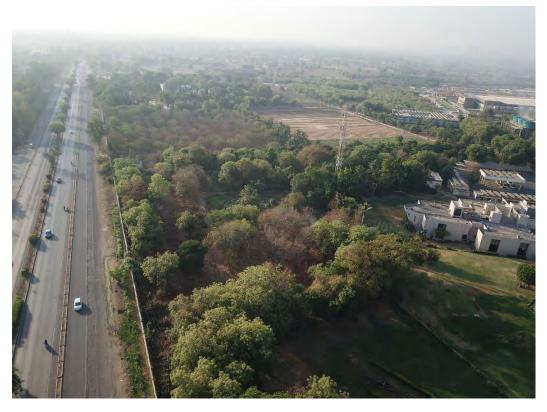


### **Annexure - XXIII**

### **Photographs of Green Belt**



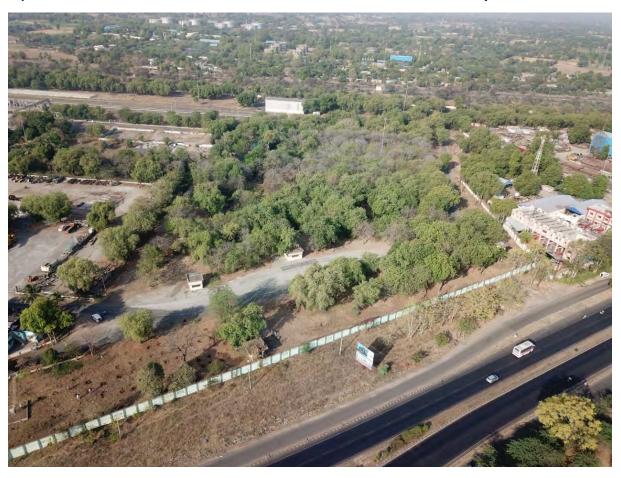
i) Near Highway Gate of IFFCO Kalol Complex



ii) West side area (State highway side) of IFFCO Kalol Complex



iii) Around Guesthouse and CORDET area of IFFCO Kalol Complex



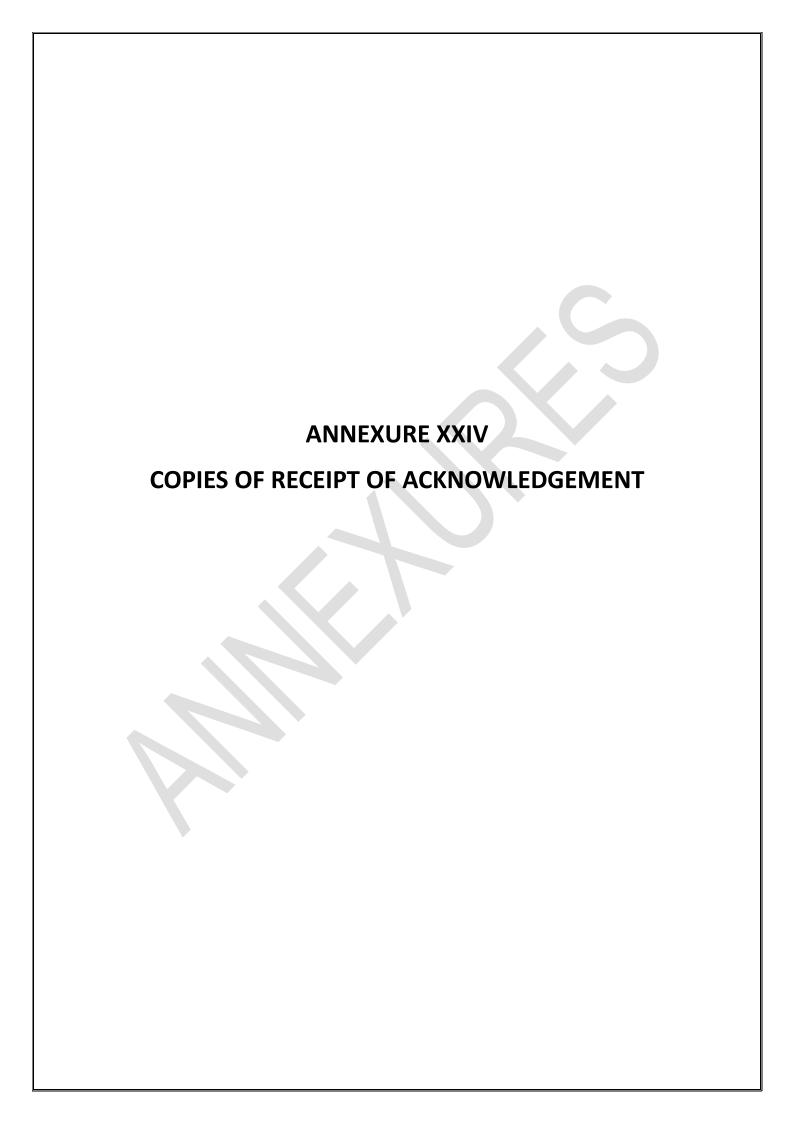
iv) North side area of IFFCO Kalol Complex



v) East side area of IFFCO Kalol Complex



vi) Front side area of Nano Fertiliser Plant







### इंडियन फारमर्स फर्टिलाईजर कोआपरेटिव लिमिटेड INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED



अंतर ध

### कलोल इकाई KALOL UNIT

KL/IR/C-106A/10

ફેબ્રુઆરી 6, 2021

yla.

સરપંચ શ્રી.

(1) સઈજ ગ્રામ પંચાયત

- (2) શેરથા ગ્રામ પંચાયત
- (3) ધાનજ ગ્રામ પંચાયત જિ. ગાંધીનગર.

મા સાફેબ શ્રી.

આ સાથે ઇફકો કલોલ એકમ ના પ્રસ્તાવિત વિસ્તૃતિકરણના સંદર્ભમાં ભારત સરકાર ના પર્યાવરણ અને વન વિભાગમાંથી આપવામાં આવેલ અનુમતિ પત્ર જોડેલ છે.

આ અંગે આપના તરફથી કોઈ સુઝાવ ફોય તો અમોને જણાવવા વિનતિ છે.

આભાર સફ,

આપનો વિશ્વાસુ, ઇન્ડીયન ફાર્મર્સ ફર્ટીલાઇઝર કો.ઑ.લિ. વતી,

74215 हार्ग 417 (डी. क धनीमहार) विरुक्त हार्यहारी निहेशह



બિડાણ: ઉપર મુજબ.

નકલ રવાના: કલેક્ટરશ્રી, ગાંધીનગર

જિલ્લા વિકાસ અધિકારીશ્રી, ગાંધીનગર

तालुडा विडास यधिडारीश्री डलोल कलोल इंकाई, पो.आ. कस्तूरीनगर, जिला : गांधीनगर-३८२४२३ (गुजरात

ाइ, पा.आ. कस्तूरानगर, जिला : गाधानगर-३८२४२३ (गुजरात फोन : (02764) 220209, 220604, 223256, 223258, 22327

ग्राम : इफको, कस्तुरीनगर फैक्स : 91-2764-22057

Kalol Unit, P.O. Kasturinagar, Dist. Gandhinagar-382423 (Gujarat Phones: (02764) 220209, 220604, 223256, 223258. 22327:

FAX: 91-2764-22057: Website: www.iffco.ii





### इंडियन फारमर्स फर्टिलाईजर कोआपरेटिव लिमिटेड INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED



### कलोल इकाई KALOL UNIT

KL/IR/C-106A/10

કેબ્રુઆરી 6, 2021

yla.

સરપંચ શ્રી

(1) સઈજ ગ્રામ પંચાયત (2) શેરથા ગ્રામ પંચાયત

(3) ધાનજ ગ્રામ પંચાયત જિ. ગાંધીનગર.

મા સાઢેબ શ્રી

આ સાથે ઇફકો કલોલ એકમ ના પ્રસ્તાવિત વિસ્તૃતિકરણના સંદર્ભમાં ભારત સરકાર ના પર્યાવરણ અને વન વિભાગમાંથી આપવામાં આવેલ અનુમતિ પત્ર જોડેલ છે.

આ અંગે આપના તરફથી કોઈ સુઝાવ ફોય તો અમોને જણાવવા વિનતિ છે.

આભાર સક

આપનો વિશ્વાસ,

ઇન્ડીયન ફાર્મર્સ ફર્ટીલાઇઝર કો.ઓ.લિ. વતી.

19215014412 (ડી.જી ઇનામદાર)

વરિષ્ઠ કાર્યકારી નિદેશક

બિડાણ: ઉપર મુજબ.

નકલ રવાના: કલેક્ટરશ્રી, ગાંધીનગર

જિલ્લા વિકાસ અધિકારીશ્રી, ગાંધીનગર

तालुङा विङास स्पिधारीश्री ङ्लोल कलोल इकाई, पां.आ. कस्तूरीनगर, जिला : गांधीनगर-३८२४२३ (गुजरात फोन : (02764) 220209, 220604, 223256, 223258, 22327

ग्राम : इफको, कस्तूरीनगर फैक्स : 91-2764-22057

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### इंडियन फारमर्स फर्टिलाईजर कोआपरेटिव लिमिटेड INDIAN FARMERS FERTILISER CO-OPERATIVE LIMITED



### कलोल इकाई KALOL UNIT

KL/IR/C-106A/10

કેબ્રુઆરી 6, 2021

पति.

સરપંચ શ્રી

- (1) સઈજ ગ્રામ પંચાયત
- (2) શેરથા ગ્રામ પંચાયત

(3) ધાનજ ગ્રામ પંચાયત જિ. ગાંધીનગર.

મા સાફેબ શ્રી.

આ સાથે ઇફકો કલોલ એકમ ના પ્રસ્તાવિત વિસ્તૃતિકરણના સંદર્ભમાં ભારત સરકાર ના પર્યાવરણ અને વન વિભાગમાંથી આપવામાં આવેલ અનુમતિ પત્ર જોડેલ છે.

આ અંગે આપના તરફથી કોઈ સઝાવ ફોય તો અમોને જણાવવા વિનતિ છે.

આભાર સહ.

આપનો વિશ્વાસ. ઇન્ડીયન ફાર્મર્સ ફર્ટીલાઇઝર કો.ઑ.લિ. વતી,

19218014412

બિડાણ: ઉપર મુજબ.

નકલ રવાના: કલેક્ટરશ્રી, ગાંધીનગર

જિલ્લા વિકાસ અધિકારીશ્રી, ગાંધીનગર

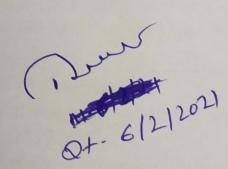
તાલુકા વિકાસ અધિકારીશ્રી ક્લોલ कलील इकाई, पी.ओ. कस्तूरीनगर, जिला : गांधीनगर-३८२४२३ (गुजरात फोन: (02764) 220209, 220604, 223256, 223258, 22327.

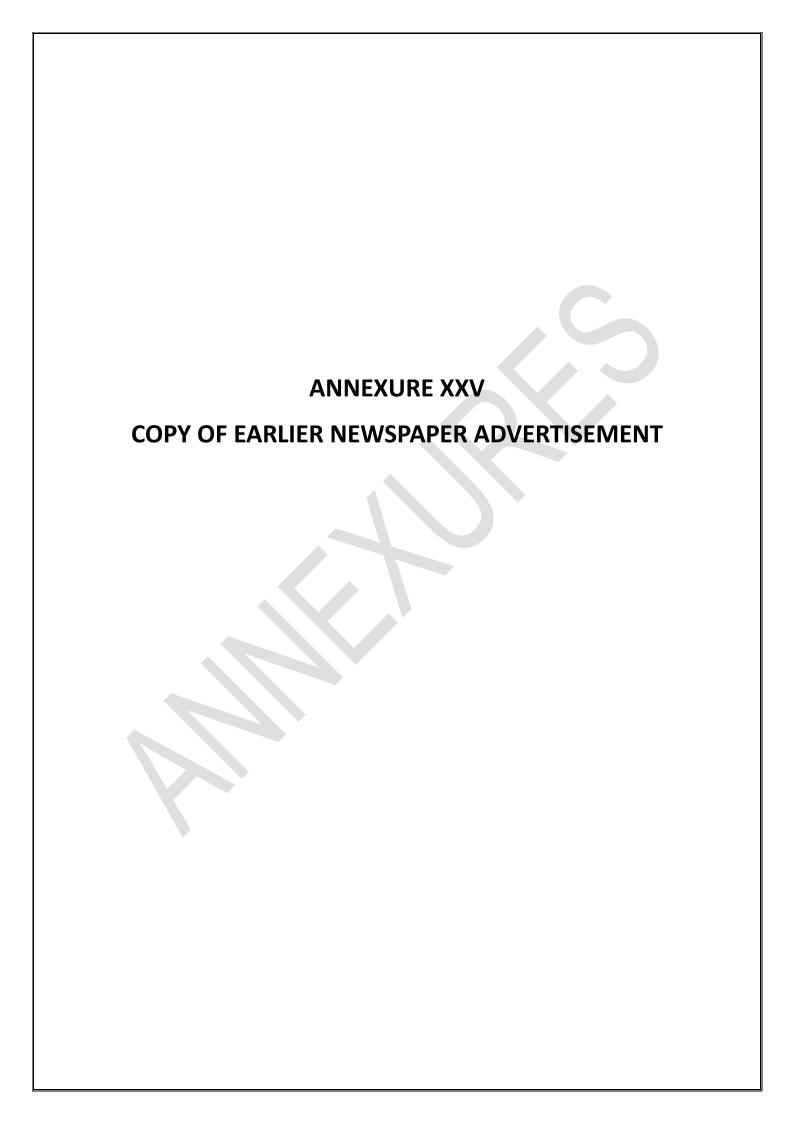
ग्राम : इफको, कस्तुरीनगर फैक्स : 91-2764-22057.

Kalol Unit, P.O. Kasturinagar, Dist. Gandhinagar-382423 (Gujarat Phones: (02764) 220209, 220604, 223256, 223258, 22327;

> FAX: 91-2764-22057: Website: www.iffco.ii

(ડી.જી ઇનામદાર) वरिष्ठ डार्यडारी निहेशड





વેટરનરી કોલેજ, આણંદ કૃષિ યુનિવર્સિટી, આણંદ ખાતે વાહન ગેરેજના જર્જરીત ધાબાને તોડી કલર કોટેડ પતરાં, ચોરસ પાછપ સાથે ફીટ કરવા માટે રસ ધરાવતી પાર્ટીઓ પાસેથી માલ-સામાન અને મજુરી સાથે કામગીરી કરાવવાના ભાવો મંગાવવામાં આવે છે. આ અંગેના જરૂરી સ્પેસીફીકેશન, શરતો અને બોલીઓ દર્શાવતા ટેન્ડર ફોર્મ અંત્રેની કચેરીએથી રૂ. ૧૫૦૦/- રોકડા ભરી મેળવી લેવું અથવા વેબસાઘટ <u>www.aau.in/tenders</u> ઉપરથી ડાઉનલોડ કરી ટેન્ડર ફી પેટે રૂ. ૧૫૦૦/- નો ''એ. એ. યુ. ફંડ એકાઉન્ટ'' ના નામનો પેએબલ એટ આણંદનો ડીમાન્ડ ડ્રાફ્ટ સામેલ કરવાનો રહેશે.

ભરેલ ટેન્ડર ફોર્મ સીલબંધ કવરમાં તા. ૨૨/૦૨/૨૦૨૧ સાંજે ૫.૦૦ કલાક સુધીમાં ફક્ત રજી. પોસ્ટ એ.ડી./સ્પીડ પોસ્ટથી જ સ્વીકારવામાં આવશે તથા કવર ઉપર ''વાહન ગેરેજના જર્જરીત ધાબાને તોડી કલર કોટેડ પતરાં ચોરસ પાછપ સાથે ફીટ કરવા માટેની કામગીટીના ભાવ'' એમ અવશ્ય લખવાનું રહેશે.

ता. 09/0२/२०२१ अंशाल : आशंड

સહી/-આચાર્ચ અને ડીનશ્રી

(अहिती/आशंह/५७०/२१/२२)

होन नंभर (०२५६२) २५१४८५



### INDIAN FARMERS FERTILISER COOPERATIVELIMITED KALOL UNIT

MOEF & CC (I.A.Division) ના નિર્દેશ મુજબની સૂચના

વિષય : ઈફકો કલોલ એકમ, પો.કસ્તુરીનગર, જી.ગાંઘીનગરના વિસ્તરણ/આધુનિકીકરણ માટેની પર્યાવરણીય મંજુરી

ઇંડિયન ફાર્સર્સ ફરિલાઇઝર કૉ-ઓપરેટીવ લિમિટેડ (ઇક્કો)ના કલોલ એકમમાં પ્લોટ નં. ૭૧૨/૮૪૬, ૮૫૫, ૮૫૬ - સઈજ, ૧૭ - ૩૭ - ધાનજ, કરતુરીનગર, કલોલ જી. ગાંઘીનગર, ગુજરાત ખાતે એમોનિયા - ચુરિયા સંકુલ આવેલ છે. ઇક્કો- કલોલ એકમના 'ફરિલાઇઝર પ્લાન્ટ ના વિસ્તરણ/આધુનિકીકરણ' ની ચોજના ને પર્યાવરણ, વન અને આબોઠવા પરીવર્તન મંત્રાલય, ભારત સરકાર ના પ્રસ્તાવ ક્રમાંક IA/GJ/IND2/185904/2009 તારીખ ૧૪ ડિસેમ્બર ૧૦૨૦ અને F.No J-11011/60/2009-IA II (1) તારીખ ૧ ફેબ્રુઆરીએ ૨૦૨૧ ક્રમશાંજૂરી આપવામાં આવેલ છે. પર્યાવરણીય મંજૂરી પત્રની નકલ SPCB/MoEF&CC પાસે અને મંત્રાલય ની વેબસાઇટ https://parivesh.nic.in પર ઉપલબ્દ્ર છે.

ડી. જી. ઈનામદાર, વરિષ્ઠ કાર્ચકારી નિદેશક ઈક્કો કલોલ એકમ, પો.કસ્તુરીનગર, જી.ગાંધીનગર, ગુજરાત, પીન-૩૮૨૪૨૩ ફોન નં.: ૦૭૯-૨૩૨૮૨૦૦૫, ૨૩૨૮૨૦૦૩

ફેક્સ : ૦૭૯-૨૩૨૮૬૦૨૦, ૦૨૭૬૪-૨૨૦૫૭૨, ઈ–મેલ: dginamdar@iffco.in





ચુવક/ ચુવતીઓ માટે ઉચ્ચ ટેકનીકલ શિક્ષણ સાથે ઉત્તમ રોજગારી દ્વારા ઉજજવળ કારકીદીંની તક

ભારત સરકારના સુક્ષ્મ, લઘુ અને મધ્યમ ઉદ્યમ મંત્રાલય અને જર્મન સરકારના સહયોગ વડે માકાર બનેલ આ સંસ્થા દ્વારા ગુજરાત સરકારના સહયોગથી અનુસુચિત જાતિ તથા ખાદિજાતી યુવક-યુવતીઓ માટે ઉચ્ય ટેકનીકલ શિક્ષણ દ્વારા રોજગાર અને સ્વરોજગારલક્ષી ઉતિધ તાલીમ કાર્યક્રમ ચલાવવામાં આવે છે.

514	કોર્પનું નામ	સમચગાળો	પ્રવેશ લાયકાત
*	पोस्ट ग्रेष्थुओट डिप्लोमा र्डन दूल डिमार्डन सेन्ड डेड डेम (PGTDCC)	qui qui	BE ਮੀਤੇਕੀકલ / ઓટોમોબાઈલ / ਪ੍લાસ્ટીક / ਮોડક્શન
R	પોસ્ટ ડિપ્લોમા ઇન દૂલ ડિઝાઇન એન્ડ કેડ કેમ (PDTDCC)	व धर्ष	BE / Diploma - મીકેનીકલ / ઓટોમોબાઈલ / પ્લાસ્ટીક / પ્રોડક્શન
3	પોસ્ટ ડિપ્લોમા ઇન ઇન્ડસ્ટ્રીયલ ઓટોમેશન એન્ડ રોબોટીક્સ (PDIAR)	વર્ષ	BE / Diploma - ਮੀਤੇ ਕੀਤલ / ਸ਼ੀડક્શન ઇલેક્ટ્રીકલ / ઇલેક્ટ્રોલિક્સ / ઇલ્સ્ટ્રમેન્ટેસન
H	કન્ડેન્સડ કોર્ય ઇન ટૂલ એન્ડ ડાઇ મેકીંગ (CCTDM)	वर्ष	દ્યોરણ ૧૦ પાસ
-	સી.એન.સી. મશીનીષ્ટ (સી.એન.સી. ઓપરેટર) (CCM)	માસ	III ટર્નર / મર્ગીનીષ્ટ (ਝડત ST તાલીમાર્ચીઓ માટે)

ક્ત ST તાલીમાર્થીઓ માટે : તાલીમેની ફી, રહેવા તથા જમવા અંગે નક્કી કરેલ રિતો મુજબની વ્યવસ્થાનો ખર્ચ ગુજરાત સરકાર હારા આપવામાં આવશે. 1લીમાર્થીઓ એ ફક્ત રૂા. ૧૦૦૦/- ભરવાના રહેશે.

SC तालीमार्थीओ माटे इंडत तालीमंजी ही माइ रहेशे.

એકમીશન તેમજ વધુ વિગત માટે સંપર્ક કરો : ઇન્ડો જર્મન ટૂલ રૂમ, અમદાવાદ - ભારત સરકારની સંસ્થા પ્લોટ નં. ૫૦૦૩, ફેઝ-૪, જીઆઇડીસી, મહેમદાવાદ રોડ, વટવા, અમદાવાદ-૩૮૨૪૪૫ મો. ૯૦૯૯૦૪૧૯૮૬, ૯૦૯૯૦૪૦૮૬૮, ૯૦૯૯૩૧૧૯૦૬ Email : info@igtrahd.com; www.igtrahd.com

ભારતના રાષ્ટ્રિપતિ વતા અને મીટી મડળ રક્ષ પ્રબંધક ] કા ટેન્ડરીંગ)ના માધ્યમથી ખુલ્લી નિવિદા આમંત્રિત કરે છે.	ા/ઝાસી નીચે જ્યાવેલ કામ માટે ઓનલાઇનો Annexure - XX		
કાંમનું નામ	ઈ-निविद्य सूचना संज्या	अंद्राफुत डिमत	
બૈરાર - ભીમસેન સેક્શનઃ પ્રોટેક્શન ઓફ સીપેજ યૂ જોઈન્ટ / ગેપ્સ ઈન આરસીસી બોક્સ ઓફ		₹ 15280177.11	
બેલએચએસ / આરયૂબી એન્ડ અપર એસોસીએટ	વર્ક્સ એટ સબવે નં. એસ	-4. એસ-9 એન	

અંદાજીત કિંમત - 0.00, નિવિદા બંધ થવાની તારીખ: 26.02.2021 ના 15.00 કલાકે. સ્વીકૃત પત્ર ઈસ્યુ થવાના સમયથી કામ પૂર્વતા/સમયગાળાની તારીખ: 06 મહિના.

એસ-13 એન્ડ એની અધર લોકેશન અંડર જ્યુરીડીક્શન ઓફ સિનીયર ડીઈએન / ઈસ્ટ ઝાંસી

- નિવિદા તારીખ: 26.02.2021ના 15.00 ક્લાક સુધી ઓનલાઈન જમા કરી શકાશે.
- સંપૂર્ણ વર્ણન અને નિવિદ્ય પ્રસ્તુત કરવા માટે ભારતીય રેલવેની વેબસાઈટ www.ireps.gov.in પર જુઓ.
   158/21 (SP)

North central railways www.ncr.indianrailways.gov.in

@CPRONCR

### ઓનલાઇન જાહેર નિવિદા નં. ૧૩ સને ૨૦૨૦-૨૧ માર્ગ અને મકાન વિભાગ, ગુજરાત રાજ્ય

ગુજરાત રાજ્યના રાજ્યપાલશ્રી વર્તી કાર્યપાલક ઇજનેરશ્રી, પાટનગર યોજના વિભાગ નં. ૪, ''બી'' બ્લોક, પાટનગર યોજના ભવન, સેક્ટર નં. ૧૬, ગાંધીનગર-૩૮૨૦૧૬ ફોન નં. ૦૭૯-૨૩૨-૫૯૧૯૯, ૯૮ અને ૯૩ દ્વારા યોગ્ય લાયકાત ધરાવતા ઇજારદારો પાસેથી

કન્સ્ટ્રકશન ઓફ મલ્ટીસ્ટોરેડ, બિલ્ડીંગ ફોર સ્ટેટ લેવલ એન્ડ કોન્સ્ટીટયુશનલ ઓફીસ એટ ગાંધીનગર (કર્મયોગી ભવન બ્લોક નં. ૩ પ્રોવાઇડીંગ એન્ડ લેયીંગ એક્ષપોસ્ટ આર.સી.સી. ફીનીસ એન્ડ સીન્થેટીક પ્લાસ્ટર) જેની અંદાજીત કિંમત રૂા. ૪૧૮.૦૦ લાખ છે.

જે કામ ઇ-ટેન્ડરીંગ પદ્ધતિથી ઓનલાઇન માંગવામાં આવેલા છે. કામના ટેન્ડર ડોક્યુમેન્ટ તથા વિગતો આ વેબસાઇટ www.mb.nprocure.com ઉપરથી તા.૧૫/૦૨/૨૦૨૧ ના ૧૮:૦૦ કલાક સુધી જોવા મળી શકશે. તેમજ ભરી શકાશે.

આ કામો અંગેની વધારાની માહિતી વિગતવાર ઉપરોક્ત કચેરી તથા વેબસાઇટ પરથી મળી શકશે.

ઓનલાઇન ટેન્ડર અંગે અપલોડ કરવાની છેલ્લી તારીખ સુધીમાં આ કચેરી તરફથી કરવામાં આવેલ સુધારા/ વધારા ઇજારદારશ્રીએ ધ્યાને લેવાના રહેશે અને ત્યારબાદ ભાવો ભરવાના રહેશે. આ બાબતે ઇજારદારશ્રીની અંગત જવાબદારી રહેશે.

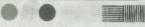
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ઈ-પ્રોક્યોએન્ટ નિવિદા સૂચના નં. એસ/05/2021 તારીખ: 03.02.			
5,1	મુદ્દાનું સંસિપ્ત વર્ણન	IICIF	દી.ઓ.ડી.
84	13 ટી બોગી બ્રેક માટે લીવર	300 NEE	15.02.202
85	રિન કોર્ટર	2020 अहह	15.02.202
86	સર્કિલપ્સ 85 એક્સ4એચ	191 MEE	16,02,202
87	ગૈફસ એસક વી42 પી2.5 ગ્રીજ	684 B-911	18,02,202
88	ઓટોમેટિક સોપ ડિસ્પેન્શર	25 4188	18.02.202
89	કોમન પાઈપ લોકેટ	150 MEE	19,02,202
90	ટાઈપ રિલે વીસીબી માટે કન્ટેક્ટર	13 4188	22,02,202
91	સર્કિટ બ્રેકર મેન ક્રોમ્પ્રેશર	54 2/66	22.02.202
92	સહિટ બેકર દીસી	52 MEE	22.02.202
93	સર્કિટ બ્રેકર બેટરી ચાર્જર	27 2466	22.02.202
94	ટેપ ચેન્જર માટે સબ કિટ પીઓએચ-1	48 સેટ	22.02.202
95	એલઈડી સિગનલ લાઈટીંગ યૂનિટ ઈસપેક્ટ રૂટ, શંટ અને કોલિંગ ઓન	331 NEE	24,02,202
96	એલઈડી સિગનલીંગ લાઈટ યુનિટ ઈસપેક્ટ રેડ, યેલો અને ગ્રીન	233 WEE	24.02.202
97	ડોપલર સાથે 3ડી-2ડી ઈકો મશીન	1 3/166	24.02.202
98	પાર્કિંગ બ્રેક સિસ્ટમ માટે પાર્કિંગ બ્રેક સિલિન્ડર	107 अहर	25.02.202
99	સર્કિટ બ્રેકર ડીસી સપ્લાપ	61 465	25.02.202
100	કોપર કેટેનરી વાપર (19/2.10 મિથી) 65 વર્ગ મિથી	122500 4[23	26.02.202
101	એકઆરપી સીટ સહ બેક રેસ્ટ	275 MEE	26.02.202
102	એપઆરવીસી-2 ઈએપયુ રેક માટે આઈએપએસ રેક	9 466	26.02.202
103	ઈન્ડીકેશન લેમ્પ તથા ઈલુમિનેશન પુશ બટનનો સેટ	Sis 88	26.02.202
104	ગીપર કેસ ટોર્ક આર્પ માટે સ્ફેરિક બ્લોક	580 અદદ	26.02.202
105	હેડલાઈટ માટે સ્વીય	52 466	26.02.202
06	બીસીએનએ વેગન માટે ફ્લેપ ડોર	1132 4166	26.02.2021
07	સિરામીક સાઈક્રિડ બોલ બેરીંગ 6305	164 466	27.02.2021
08	મેટલાઈઝ્ડ કાર્બન સ્ટ્રાઈપ્સ	746 અદદ	27.02.2021
09	સર્કિટ બ્રેકર સ્કવેન્જર બ્લોઅર ટીએમ	11 1/166	27.02.2021
10	કાઇન્ડ ગીયર કપલીંગ	3316 8	27.02.2021

કમાંક 97 માટે ટિપ્પણી: ઉમેદવાર આપૂર્તિકર્તાઓ સાથે જૂપ પર બોલી – પૂર્વ બેઠક તારીખ: 09.02, 2021 ના બપોરે 3.00 કલાકે આયોજન કરવામાં આવશે. જૂપ આઈડી 83682518410 છે તથા પાસવર્ડ 9ન્નાં)BJ છે. ઈચ્છુક વિકેતા www.ireps.gov.in પરથી વિનિર્દેશન તથા નિવિદાનું વર્ણન પ્રાપ્ત કરી શકે છે. કોઈપણ પ્રકારના સ્પર્પ્ટીકરણ માટે વિકેતા શ્રી એસ.બી. ક્રિઝા (કેપ્સુટી સીએમએમ / એકમિન) નો 9004490789 ઇપર સંપર્ધ કરી શકે છે. વિસ્તુત સ્પર્યા : ઈએપ ક્ષે અરીદીના નિર્દેશનો ત્યાર વિસ્તુત નિર્દેશ ભરતો સંવેશિત્સભાવની પ્રાપ્ત અર્થિક છે.

વિસ્તૃત સુચના, ઈએપડી, ખરીદીના નિયંત્રજ્ઞો તથા વિસ્તૃત નિવિદા શરતો સંબંધિત જાણકારી યાટે મહેરબાની કરીને વેબસાઈટ www.ireps.gov.in તથા www.wr.indianrailways.gov.in જુઓ.

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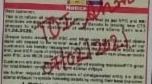
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