Item No. 01 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 544/2023

Paras Nath & Anr. Applicant(s)

Versus

Uttar Pradesh Pollution Control Board & Ors Respondent(s)

Date of hearing: 15.09.2023

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Applicant(s): Mr. Gaurav Agarwal, Adv. for Applicant (Through VC)

ORDER

1. The issue raised in this application is about pollution being caused by Respondent No.8 namely Indian Farmers Fertilizers Cooperative Limited, Phulpur.

2. Learned Counsel for the Applicant has submitted that Respondent No.8 was granted consent only in respect of urea and no consent for production of ammonia has been granted, yet Respondent No.8 is operating the Ammonia and Urea Plant at IFFCO, Phulpur, Prayagraj in violation of environmental clearance and consent to operate under the Air and Water Act and releasing untreated ammonia water affecting the soil and crops of the nearby agricultural land and contaminating underground water.

3. It is also the case of the Applicant that the residual waste, untreated water is drained out to the concrete drain and then to trench

which goes from the field of the farmers upto the river and pollutes the entire area as well as river part.

4. The Learned Counsel for the Applicant has further pointed out that the Applicant had earlier approached the High Court at Allahabad as also approached Supreme Court but he was required to avail consent and other statutory alternate remedies.

5. In view of the issue raised in the original application, we deem it proper to constitute a Joint Inspection Committee comprising of the Director deputed by the Member Secretary, Central Pollution Control Board (CPCB); Member Secretary, State Pollution Control Board (SPCB), Secretary, Central Ground Water Authority (CGWA) and District Magistrate, District Prayagraj. The District Magistrate will act as a nodal agency.

6. The Joint Inspection Committee will visit the site and examine if the Respondent No.8 is operating and producing ammonia without their being any consent and other requisite clearances from the competent authority, ascertain the extent of pollution and damages caused by Respondent No.8 and also suggest the remedial measures taken and to be taken.

7. The Committee is directed to submit the action taken report within a period of 8 weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

8. A copy of this order be forwarded to the Members of the Committee by e-mail for compliance.

9. In the meanwhile, let notice be issued to Respondent No.8.

10. Applicant is directed to serve Respondent No.8 and file affidavit of service before the next date of hearing.

11. List the matter on 07.12.2023.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

September 15, 2023
Original Application No. 544/2023
JG

Uttar Pradesh Pollution Control Board

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

170943/UPPCB/Allahabad(UPPCBRO)/CTO/both/PRAYAGRAJ/2022 **Date: 21/12/2022**

To,

M/s

Indian Farmers Fertiliser Cooperative Limited

IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj, Uttar Pradesh-212404,PRAYAGRAJ,212404

Application Id-18776946

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule-6(2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 notified under Environment (Protection) Act, 1986 as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

CCA is hereby granted to **Indian Farmers Fertiliser Cooperative Limited** located at **IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj, Uttar Pradesh-212404,PRAYAGRAJ,212404**. subject to the provisions of **the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA Indian Farmers Fertiliser Cooperative Limited **granted for the period from 01/01/2023 to 31/12/2027** and valid for manufacturing of following products.

S No	Product	Quantity	Unit

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	**3000 Cubic Meter/day shall be used for irrigation/ gardening and water sprinkling for dust suppression**	**STP**	**ZLD**
Industrial	**13300 Cubic Meter/day treated effluent shall be reused in process, cooling water makeup, washing, ash quenching, water sprinkling and for irrigation purposes.**	**ETP**	**ZLD**

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

Industrial Effluent Quality Standard

S.No.	Parameter	Standard
1	BOD	30 mg/l
2	COD	250 mg/l
3	TSS	100 mg/l
4	Free Ammonia	2.0 mg/l
5	Ammonical Nitrogen	50 mg/l
6	Total Kjeldahl Nitrogen	75 mg/l
7	Nitrate Nitrogen as N	10 mg/l
8	pH	6.5- 8.5

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality.In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	As per E(P) Act 1986.
2	BOD (mg/L)	As per E(P) Act 1986.
3	TSS (mg/L)	As per E(P) Act 1986.
4	Fecal Coliform (MPN/100ml)	As per E(P) Act 1986.

3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	Primary Reformer Furnace-01	LNG	01	Particulate Matter	33 meter form ground level.
2	Primary Reformer Furnace-02	LNG	02	Particulate Matter	30 meter form ground level.

3	Boilers-03 Nos. (capacity - 125 TPH each)	Coal	03	Particulate Matter	100 meter high common stack from ground level with ESP.
4	Boiler (Capacity-200 TPH)	LNG	04	Particulate Matter	120 meter high stack from ground level.
5	Urea Priling Tower-01	-	05	Particulate Matter	96 meter high stack from ground level.
6	Urea Priling Tower-02	-	06	Particulate Matter	104 meter high stack from ground level.

Emmission Quality Standards

S No.	Stack no	Parameters	Standards
1	01	Oxides of Nitrogen	As per E(P) Act 1986.
2	04	Oxides of Nitrogen	As per E(P) Act 1986.
3	02	Oxides of Nitrogen	As per E(P) Act 1986.
4	03	Particulate Matter	As per E(P) Act 1986.
5	05	Particulate Matter	As per E(P) Act 1986.
6	06	Particulate Matter	As per E(P) Act 1986.

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	**Industrial Area**		**Commercial Area**		**Residential Area**		**Silence Zone**	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

4. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 :-

The Factory Manager of M/s Indian Farmers Fertiliser Cooperative Limited. is hereby granted an authorization to operate a facility for collection and storage of Hazardous wastes. The authorization is granted to operate a facility for generation, collection and storage of hazardous wastes within factory premises for following category of wastes:-

S.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Spent Catalyst (Sch-1, Cat 18.1)	through TSDF/Authorized Recyclers	197 MT/Annum
2	Used or spent oil (Sch.-1, Cat.- 5.1)	through TSDF/Authorized Recyclers	204 KL/Annum
3	Empty Drums contaminated with hazardous chemicals /wastes (Sch-1, Cat-33.1)	through TSDF/Authorized Recyclers	1500 Nos.
4	ETP sludge (Sch-1, Cat-35.3)	Through TSDF	0.6 MT/Annum

The authorization shall be in force and shall be valid upto 31/12/2027. The authorization is subject to the conditions stated below and such conditions as may be specified in the rules for the time being in force under Environment (Protection) Act, 1986.

Terms and conditions of Hazardous Waste authorization :-

(i) The authorization shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

(ii) The authorization and its renewal shall be produced for inspection at the request of an officer authorized by the SPCB.

(iii) The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the SPCB.

(iv) Any unauthorized changes in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.

(v) It is the duty of the authorized person to take prior permission of the SPCB to close down the facility.

(vi) An application for the renewal of an authorization shall be made as laid down under these rules.

(vii) The unit shall comply with any other conditions specified in the guidelines issued by the MoEF or CPCB/SPCB from time to time.

(viii) The authorization is valid for temporary storage of Hazardous Waste within premises only.

(ix) The authorized agency shall ensure that on-line data with regard to quantity and nature of hazardous chemicals being used in the plant as well as air emission and waste generated within premises is displayed on Display Board of size 6x4 feet outside the main factory gate within premises

(x) It is duty of the authorized person to take prior permission of this Board to close and cleanup the facility for treatment, storage and disposal of hazardous waste.

(xi) The applicant shall maintain record of hazardous waste in Form-3 and shall submit annual return in Form-4 on or before the 30th day of June following to the financial year to which that return relates.

(xii) In no case any hazardous waste shall be disposed off on land, in any drain, or into any water stream. All spillage must also be safely collected and stored.

(xiii) Before the hazardous waste is stored or dumped in the facility, applicant must conduct a detailed physical and chemical analysis of hazardous waste sample and report to the Board.

(xiv) Dried hazardous sludge from the process in the plant shall be stored in double lined HDPE pit constructed with R.C.C. or such material which does not react with the waste contained in it.

(xv) The storage area should be fenced properly and Sign/Notice Board indicating 'Danger' and 'Hazardous' shall be displayed at appropriate position both in Hindi and English.

(xvi) The industry shall store non-ferrous metal waste, used oil/spent oil waste in sealed drums placed on impervious floor under covered shed. Hazardous waste if required shall be sold only to Registered

Recyclers/Re-processors.
(xvii) In case of any transportation of hazardous waste, the details in Form-10 of the Hazardous and Other Wastes Rules, 2016 shall be submitted to the Board.

5. Essential documents to be submitted by the Industry/Unit as Applicable:-

(i) Annual return in Form-4 and Waste Disposal Manifest in Form-10 under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and Third Party Audit Report.
(ii) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
(iii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.
6. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
7. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.
8. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.
9. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by

the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

Specific Conditions:-
1. This CCA is valid for production of Nano-Urea/Nano-Sulphur/Nano-Micronutrients-36500 KL/Annum from Nano Fertilizer Plant and Urea- 5790 MT/day from Urea Production Plant, by use of main raw material A-400 Kg/day, B1-200 Litre/day, B2-200 Litre/day, C-100 Kg/day, D-10 Kg/day, F1-10900 Kg/day, H-85 Kg/day for Nano Fertilizer Plant and Natural Gas-3320146 SM3/day for Urea Production Plant. Ammonia 3300 MT/day and Carbon Dioxide - 4301 MT/day will be the Intermediate products during the process of manufacturing of Urea.
2. Industry shall comply with the conditions of Environmental Clearance for issued by MoEF&CC New Delhi vide EC Identification No. EC22A016UP124030 dated 14-03-2022 and CTE issued vide letter no. 152957/UPPCB/Allahabad(UPPCBRO)/CTE/PRAYAGRAJ/2022 Dated:- 27/05/2022 by UPPCB.
3. Industry shall treat the effluent to meet the effluent discharge standards for Fertilizer industries, as notified under Environment (Protection) Rule, 1986.
4. Industry shall treat Nitrogenous Waste water through Hydrolyser unit and Non Nitrogenous Waste water through RO based ETP. The treated water shall be reused in process, cooling water makeup, washing, ash quenching, water sprinkling and for irrigation purposes.
5. Industry shall not discharge any effluent outside the industry premises. Industry shall ensure ZLD.
6. Storm Water drain shall be kept separate in such manner that industrial effluent does not get mixed with storm water.
7. Industry shall treat domestic effluent through STP as per norms and treated domestic effluent shall be used in irrigation/ gardening and water sprinkling for dust suppression.
8. Industry shall install PTZ camera at strategic locations for monitoring and the URL and password shall be provided to the Board within 01 month.
9. The industry shall ensure to take all necessary actions to mitigate the gaseous emissions.
10. Industry shall establish Miyawaki forest inside the industry premises in sufficient area and the treated effluent from the STP shall be used for forestation.
11. Industry shall maintain Electro Magnetic Flow meters at Water source and ETP outlet along with connectivity to CPCB and UPPCB server. The logbook of mentioned Flow meters reading shall be maintained.
12. The industry shall operate and maintain installed Online Effluent quality Monitoring System effectively and ensure continuous connectivity to CPCB and UPPCB server. OCEMS facility shall also be calibrated from recognized agency on six monthly basis.
13. Ash pound shall be maintained in such a manner that ground water does not get affected.
14. The effluent level in guard ponds shall be kept below the free board.
15. Industry shall submit the Analysis report of ground water near to the Guard Ponds and hand pumps of adjacent villages of NABL accredited laboratory, on six monthly basis.
16. Industry shall comply with the provisions of Hazardous and Other waste (Management & Trans boundary Movement) Rules 2016 and submit the detail of Hazardous waste disposal in form-10.
17. Industry shall comply with the conditions of NOC issued by UPGWA for withdrawal of ground water and shall install rain water harvesting system as per design of Ground Water Authority.
18. Fly Ash/Solid waste shall be disposed in such manner, so that no water, air and soil pollution takes place.
19. Industry shall operate and maintain APCS installed at existing 02 Nos. Primary Reformer Furnaces, 03

Nos. Boilers of capacity 125 TPH each, 02 Nos. Urea Prilling Towers and 60 TPH HRSG, in such manner to achieve the emission standards for fertilizer unit, prescribed under Environmental (Protection) Rules, 1986.
20. Industry shall submit the Stacks/Ambient air monitoring report of NABL accredited laboratory on quarterly basis.
21. Industry shall operate and maintain installed Online Continuous Emission Monitoring System for the parameters PM, NOx and SO2, effectively and transmit data to CPCB and UPPCB server. Industry shall also calibrate installed OCEMS facility from recognized agency on six monthly basis.
22. The logbook for records of fly ash generation and its disposal shall be maintained properly.
23. Industry shall provide water sprinkling system at coal handling plant, conveyer belt to suppress the dust emission.
24. The industry shall develop proper green belt as per the guidelines issued vide Board office order no. H10405/220/2018/02 Dt. 16-02-2018.
25. Industry shall install rain water harvesting system as per guidelines of ground water authority for recharging of ground water.
26. Unit shall abide by directions given by Hon'ble Supreme Court, Hon'ble High Court, Hon'ble NGT, Central Pollution Control Board and UPPCB for protection of safe guard of environment from time to time
27. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CCA will automatically be effective with additional conditions mentioned in the closure revocation order.
28. Industry shall submit environmental statement in prescribed format as per rule 14 of Environment (Protection) Act, 1986.
29. Industry shall comply with the relevant provisions of Environmental Laws.
30. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
31. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
32. An application for the renewal of an authorization shall be made in form 1, before its expiry as laid down in rule. It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.
33. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board’s inspecting officials.
34. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
35. The authorized person shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.
36. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms

and conditions of the authorization issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

37. You are directed to display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.

38. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.

39. You shall have the valid membership of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil and Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat. permitted by U.P.P.C.B)., and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only.

40. Industry shall store the hazardous waste safely and send it to TSDF/incinerator within Ninety days.

RAJENDRA SINGH

Digitally signed by RAJENDRA SINGH
Date: 2022.12.23 20:37:01 +05'30'

Chief Environmental Officer (circle-2)

Copy to:

Regional Officer, UPPCB, Prayagraj with direction to send the compliance report of CCA conditions on quarterly basis

RAJENDRA SINGH

Digitally signed by RAJENDRA SINGH
Date: 2022.12.23 20:37:13 +05'30'

Chief Environmental Officer (circle-2)

NOC, MOEF (PEP)

Annexure - III

तार :
Telegram : PARYAVARAN, NEW DELHI
दूरभाष :
Telephone : 4364968
टेलेक्स :
Telex : W-66185 DOE IN
FAX : 4360678

भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स
PARYAVARAN BHAWAN, C.G.O. COMPLEX
लोदी रोड, नई दिल्ली-110003
LODI ROAD, NEW DELHI-110003

No.J-11011/3/95-IA.II(I)

ED(NF)
SCGM(PEP)
GM(PEP)

March 23, 1995

23/3/95

OFFICE MEMORANDUM

Subject:- Expansion of Phulpur Fertilizer Plant (additional ammonia plant of 1350 MTPD and urea plants of 2 x 1100 MTPD and 18 MW TG-CPP and supporting facilities) by IFFCO - environmental clearance reg.

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This has reference to letter No. Nil dated 27th January, 1995 and subsequent letters of 14th February, 20th February and 28th February, 1995 from Managing Director, Executive Director (NF) and General Manager (TSD) on the above subject.

The project has been examined and environmental clearance is accorded subject to implementation of the following conditions and environmental safeguards :

i. The project authorities must adhere to the stipulations made by the U.P. Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.

iii. The gaseous emission (SO_2, NO_x, NH_3, particulate matters, urea dust and HC) from various processes/units should conform to the standards prescribed by the concerned authorities, from time to time. At no time

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the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the control measures are rectified to achieve the desired efficiency.

iv. Atleast 5 ambient air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentrations of SPM, SO_2, NO_x, NH_3 and HC are anticipated in consultation with the State Pollution Control Board.

The air quality monitoring stations should be selected on the basis of mathematical modelling to represent short-term ground level concentrations, human settlements, sensitive targets etc.

Port holes and samples facilities should be provided for the stacks as per the Central Pollution Control Board Guidelines. Stack emissions should be monitored by setting up an automatic continuous stack monitoring unit in consultation with the State Pollution Control Board.

Data on ambient air quality and stack emissions should be submitted to this Ministry once in six months and to the State Pollution Control Board once in three months along with the statistical analysis and interpretation.

v. Storage of ammonia should not exceed the present level. Out of three storage tanks one should be kept empty for emergency use.

vi. Ammonia should be recycled to the extent possible in the ammonia plant before passing it through stacks.

....3/ -

vii. Ammonia gas leakages from storage and loading points should be efficiently controlled or collected and scrubbed or may be sent to incinerator for flaring.

Adequate precautions for handling ammonia vapours in case of emergency situation arising due to closure of the plant should be taken.

viii. Fugitive emissions should be controlled, regularly monitored and data recorded. Automatic monitors for ammonia should be provided at appropriate places in the plant.

ix. Low NO_x burners should be used to limit NO_x emissions to ensure compliance with the standards for ground level values prescribed by the Central Pollution Control Board.

x. Industry should provide separate outlets for storm water, waste waters and process effluents. Waste waters from the raw water treatment plant, DM plant and the boiler blow down should not be allowed to mix up with the ammonia and urea plant effluents. Proper segregation of different effluents should be done.

xi. Oil-bearing waste waters should be treated for removal of oily matter before discharge and oil traps should be properly maintained so that the effluent conforms to the prescribed standards.

xii. Final treatment effluent should conform to MINAS. The waste water should be recycled to the extent possible and efforts should be made to practice zero discharge from the fertilizer complex. There should be no discharge from the plant into river Ganga.

xiii. Guard Pond(s) of sufficient holding capacity should be provided to cope up with the effluents discharged during the process disturbances. The contributing units should be immediately shut down and should not be restarted without bringing the system back to normalcy.

Structural stability of the Guard Pond with respect to leakages/cracks and other factors

should be ensured. Monitoring of surrounding area ponds and ground water quality (wells) for relevant parameters should be carried out on a regular basis. Nitrate levels in the ground water particularly dug wells, borewells etc. should especially be monitored to detect NO_3 contamination in the area.

xiv. Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters. Routine toxicity test of effluent with fish and fish-food organisms should also be regularly done at least once a month. Monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this Ministry once in six months and to the State Pollution Control Board once in three months.

Ground water around the ash pond area should be regularly monitored and report sent to this Ministry and State Pollution Control Board.

xv. The hazardous wastes should be handled as per the Hazardous Waste (Management & Handling) Rules, 1989 of the Environment (Protection) Act, 1986.

A plan for treatment and disposal of accumulated chromium waste should be prepared and submitted to the Ministry within three months.

xvi. Handling, manufacture, storage and transport of hazardous chemicals should be accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.

xvii. On-site and off-site emergency preparedness plans as required under the Rule 13 and 14 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 should be prepared and approval from the competent authorities should be obtained.

Isopleths/nomograms indicating spacial distribution of concentrations of toxic gas during ac

wind conditions should be prepared and displaced at appropriate locations so as to help the designated Emergency Officer/Team to organise rescue operations in case of accidental release of toxic gases/vapours.

xviii. Adequate measures for the control of noise within the plant should be taken up as to keep the noise levels below 85 dBA in the working environment.

xix. A scientific study should be commissioned to study impact on ground water of leachates from the ash pond area.

xx. Pumps efficiency test should be carried out as suggested by the State Irrigation Department and report submitted to them and this Ministry.

Persons working near the noisy machines in ammonia plant, urea plant, TG IGP Compressor Room, DMP etc. should be required to use ear muffs/plugs.

xxi. For controlling micro-biological activities in the cooling water non-chromate treatment should be adopted.

xxii. The practice of venting off CO_2 during up set conditions/non-operation of the unit(s) attached to the urea plant should be stopped. An alternate solution to utilize CO_2 should be found out so as to avoid noise nuisance in the area.

xxiii. Suitable alarm system and standard procedure for transmitting the information on the occurrence of an accident to the proper focal point should be established. Steps should also be taken to ensure access to information on weather conditions prevailing at that time and weather forecast. Wind socks at appropriate locations should be provided.

xxiv. Efforts should be made to increase green belt all around the fertilizer complex and

the township. Native plant species should only be selected for this purpose in consultation with the local DFO.

xxv. The industry should provide a purge gas recovery unit for removing ammonia, H_2 and CH_4 instead of burning in the primary reformer.

xxvi. Possibility of selling or recycling of used catalyst be explored.

xxvii. The project authorities should set up laboratory facilities for collection and analysis of samples under supervision of competent technical personnel, who will directly report to the Chief Executive.

xxviii. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive, who will report directly to the Head of the organisation.

xxix. Periodic medical check-up of the workers should be done and records maintained.

xxx. The funds earmarked for the environmental protection measure should not be diverted for other purposes and yearwise expenditure should be reported to this Ministry and to the State Pollution Control Board under the rules prescribed for environmental audit.

3. The Ministry or any competent authority may stipulate any further condition(s) on receiving reports from the project authorities/SPCB/R.O. of Ministry of Environment and Forests.

4. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

5. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of

Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(K.K. Jain)
Jt. Director

Secretary
Ministry of Chemical & Fertilizers
Shastri Bhavan, NEW DELHI

Copy to :

1. The Managing Director, IFFCO, 34, Nehru Place, New Delhi.
2. The Chairman, U.P. Pollution Control Board, PICUP Bhavan, 3rd floor, B-Block, Vibhuti Khand, Gomti Nagar, Lucknow.
3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi.
4. Chief Conservator of Forests, Regional Office, B-1/72, Sector-K, Aliganj, Lucknow-226020
5. Joint Secretary (Plan Finance), Department of Expenditure, North Block, New Delhi.
6. Adviser (PAD), Planning Commission, Yojana Bhavan New Delhi.
7. Guard file.
8. Monitoring file.
9. Record file.

(K.K. Jain)
Jt. Director

Annexure - IV

F. No. J-11011/150/2006- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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

E-mail : pb.rastogi@nic.in
Telefax : 011-24367668
Dated July 14, 2006

To

Shri Rajsekharaiah
General Manager
I.F.F.C.O.
P.O. Ghianagar
Allahabad 212 404
U. P.

Fax No. : 05332- 251253
E-mail : Phulpur@iffco.nic.in

Sub: Capacity enhancement/de-bottlenecking and LNG conversion of IFFCO at P.O. Ghianagar, Allahabad, U.P. by M/s IFFCO – Environmental clearance reg.

Ref: Your letter no. nil dated 12th April, 2006.

Sir,

This has reference to your letter no. nil dated 12th April, 2006 on the above mentioned subject alongwith questionnaire, EIA/EMP, risk assessment report and CD containing above mentioned document and subsequent communications dated 12th May, 2006, 22nd May, 2006 and 1st June, 2006 seeking environmental clearance under the Environmental Impact Assessment Notification, 1994.

2.0 The Ministry of Environment & Forests has examined the application. It is noted that M/s IFFCO have proposed for the capacity enhancement (de-bottlenecking and LNG conversion) from 4290 to 5,145 MTPD urea and 2,497 to 2,955 TPD Ammonia at Phulpur, Allahabad in Uttar Pradesh. Feed Naphtha will be replaced with R-LNG (Re-Gasified liquid Nitrogen Gas) except in case of LNG shortage/emergency when LNG will be used. Total land available is 432.3 ha and no additional land will be required for the expansion project.

3.0 SO_2 emissions from Ammonia Plant will be reduced due to use of cleaner fuel. Installation of CO_2 recovery plant will reduce CO_2 emissions in the environment. Total water requirement from the ground water for the existing plant is 35,500 m^3/d and no additional water will be required for the expansion project. All the treated effluent will be recycled and reused in the process or green belt development. No additional effluent will be generated and discharged outside the premises except during rainy seasons. Ash, lime sludge and spent catalyst will be generated as solid waste and will be disposed off properly.

4.0 Public hearing meeting was held on 8th August 2005. 'NOC' has been accorded by the UPPCB vide letter no F55.780/c–2/NOC-3306/ 05 dated 08.02.2006. Total cost of the project will be Rs. 263.09 Crores.

5.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above unit under the EIA Notification, 1994 as amended subsequently subject to the compliance of the terms and conditions mentioned below:

A. SPECIFIC CONDITIONS:

i. The gaseous emissions (SO_2, NO_X, NH_3, Urea dust) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. CO_2 recovery plant shall be installed to reduce CO_2 emissions in the environment. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

ii. In urea plant, particulate emissions shall not exceed 50 mg/m^3. Monitoring of prilling tower shall be carried out as per the CPCB guidelines. Hydrocarbon monitors shall be installed.

iii. Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the UPPCB and data submitted to the Ministry's Regional Office at Lucknow six monthly and UPPCB quarterly alongwith statistical analysis.

iv. Total water requirement after expansion shall not exceed 35,500 m^3/d. All the effluent generated shall be recycled & reused in the process to reduce the fresh water consumption or green belt development. No effluent shall be discharged outside the premises except during the rainy season after meeting the norms prescribed under the E (P) Act, 1986 and UPPCB whichever are more stringent.

v. Regular monitoring of ground water by installing peizometric wells around the guard pond and Chromium sludge disposal site shall be periodically monitored and reports submitted to Ministry's Regional Office at Lucknow, CPCB and UPPCB.

vi. As per the Fly ash notification, 100% utilization of the fly ash generated shall be ensured. Ash shall be provided to different users for making bricks etc. or properly used for filling low lying areas of town ship, surrounding villages and developing green belt. Spent catalysts generated shall be properly stored in closed metallic drums before selling to authorized recyclers / reprocessors. Waste oil shall be used in steam generation plant as fuel alongwith coal or sold to authorized recyclers / reprocessors.

vii. The company shall undertake adequate protection measures for handling of ammonia vapours in case of plant upset condition. Safety well exhaust and drains shall be connected to a separate close header from which ammonia vapours shall be vented from vent stack after diluting with stream.

viii. The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries.

ix. The company shall develop rain water harvesting structures to harvest the run off water from the roof tops and by laying a separate storm water drainage system for recharge of ground water.

x. Green belt already developed in 33 % shall be properly maintained and an effort shall be made to further increase the percentage by regularly planting trees at all the vacant spaces to mitigate the effects of fugitive emissions all around the plant. Further development of green belt shall be as per the Central Pollution Control Board guidelines. Density of trees at the site shall be maintained as 2,000-2,500 trees/ha.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the U.P. Pollution Control Board (UPPCB) and the State Government.

ii. No further expansion/modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 2003.

iv. The project proponent shall also comply with all the safeguards recommended in the EIA /EMP Report.

v. The project authorities will set up a separate environmental management cell for effective implementation of all the above stipulations under control of Senior Executive.

vi. As proposed in EIA/EMP, Rs. 60.50 Crores and Rs. 9.00 Crores allocated towards capital cost and recurring expenditure/annum shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government and a time bound implementation schedule for all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purposes.

vii. The Regional Office of this Ministry at Lucknow / Central Pollution Control Board/ U. P. Pollution Control Board will monitor the stipulated conditions. A six monthly compliance status report and the monitored data alongwith statistical interpretation shall be submitted to monitoring agencies regularly.

viii. 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 U. P. Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Lucknow.

ix. 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 commencing the land development work, if any.

6.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

7.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.

8.0. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act 1991 along with their amendments and rules.

14/7/06

(Dr. P. B. Rastogi)
Additional Director

Copy to:

1. Secretary, State Department of Environment, Government of Uttar Pradesh, Room No. 3, New Buildings, Vidhan Bhavan, Lucknow – 226 001, U.P.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.
3. The Chairman, Uttar Pradesh State Pollution Control Board, 111 Floor, PICUP Bhavan, Vibhuti Khand, Lucknow – 226 020, U.P.
4. The Chief Conservator of Forests, Regional Office (Central Region), Kendriya Sadan, Sector H, 5th Floor, Aliganj, Lucknow – 226 024, U.P.
5. Joint Secretary (CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
7. Guard File.
8. Monitoring File
9. Record File.

(Dr. P. B. Rastogi)
Additional Director

ENVIRONMENTAL CLEARANCE

PARIVESH

(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 Executive Director

INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)

IFFCO Phulpur Unit, Ghiyanagar, Prayagraj-212404,,Allahabad,Uttar Pradesh-212404

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/UP/IND3/254152/2005 dated 02 Feb 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A016UP124030**
2.	**File No.**	J-11011/150/2006-IA II (I)
3.	**Project Type**	Expansion
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	5(a) Chemical fertilizers
6.	**Name of Project**	Modernization and Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer, Phulpur Unit at IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj, Uttar Pradesh
7.	**Name of Company/Organization**	INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)
8.	**Location of Project**	Uttar Pradesh
9.	**TOR Date**	11 May 2005

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

Date: 14/03/2022

(e-signed)
Dr. R.B. Lal
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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By Speed Post/Online

File No. IA-J-11011/150/2006-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)
***

Indira Paryavaran Bhawan
Jorbagh Road,
New Delhi - 110003

Dated: 14th March, 2022

To,

M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO)
IFFCO Phulpur Unit, Ghiyanagar,
Prayagraj-212404, Allahabad,
Allahabad, Uttar Pradesh-212404

Email: iffcofertilizer2020@gmail.com

Project: Proposal for Modernization and Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer with proposed production capacity of 36,500 KLA, located at IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj, Uttar Pradesh)– Consideration of Environmental Clearance-Regarding.

Sir,

This has reference to your proposal No. IA/UP/IND3/254152/2005, dated 02.02.2022, and additional information vide letter dated 17.02.2022 on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Modernization and Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer with proposed production capacity of 36,500 KLA, located at IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj, Uttar Pradesh.

3. The details of existing and expansion products and their capacity, as under:

S. No.	Product	Unit	As per EC dated 14.07.2006	As per No Increase in Pollution certificate granted from UPPCB	After Modernization & Expansion	Remarks
1.	Urea	MTPD	5145	5790	5790	No Change
2.	Ammonia	MTPD	2955	3300	3300	
3.	Captive Power	MW	53.5	53.5	53.5	
4.	Nano-Urea/ Nano-Sulphur /	KL/ Annum	0	0	36,500	Additional Product

	Nano-Micronutrients					

4. The project is covered under the category 'A' of item 5(a) - chemical fertilizer of the Schedule to the Environment Impact Assessment (EIA) Notification, 2006 and its subsequent amendments.

5. The Standard ToR has been issued by Ministry vide letter dated 18.11.2021. The Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 04.01.2022. The PH was presided over by the Additional District Magistrate. The Main issues raised during the public hearing are related to employment generation, subsidy on product and product bottle size. The EAC deliberated the action plan on the issues raised during PH and found in order.

6. Details of Earlier ECs: The Ministry had granted earlier EC to the existing project vide letter no. J-11011/150/2006-IA II (I) dated 14.07.2006 for Capacity enhancement/de-bottlenecking and LNG conversion of IFFCO Phulpur Complex in favour of M/s Indian Farmers Fertiliser Cooperative Limited (IFFCO). PP reported that over a time, plant has adopted many conservation measures to increase the efficiency of plant and reduce the pollution load and energy. The existing plant is operating on full load with less resources. Considering the S.O. 980 (E) dated 02.03.2021 notification of MoEF&CC, plant has obtained Certificate/Approval under no increase in pollution load for expansion in the production of Urea and Ammonia by 12.5% and 11.7% respectively from the UPPCB vide letter no. H64208/C-2/Gen-599/2021 dated 09.08.2021. The PP reported that the Consent to Operate was issued by UPPCB, vide letter dated 04.01.2022 which is valid upto 31.12.2023.

The IRO, MoEFCC, Lucknow has inspected the Unit on December 3-4, 2021 and observed some non-compliances w.r.t. management coal and fly ash, storm drain, bore wells, and rain harvesting pit. Accordingly, the M/s IFFCO, vide letter dated 07.01.2022, has submitted the Action Taken Report along with documentary proof. Based on the information submitted by the PP, the IRO, MoEFCC, Lucknow has issued the certified compliance report of earlier EC conditions, vide their letter dated 27.01.2022. The Committee deliberated the Action Taken Report and certified compliance report of earlier EC conditions and found in order.

7. The PP reported that the existing land area is 776.52 acres (excluding CORDET) and expansion is proposed within the existing land area. Industry has already developed greenbelt in an area of 268.67 acres which will increase to 272.95 acres i.e., 35.2% after expansion. The estimated project cost for expansion including EMP cost is Rs. 195 Crores. The capital cost earmarked towards environmental pollution control measures in expansion is Rs. 3.09 Crores and recurring cost (Operation and maintenance) for proposed project will be about Rs. 0.17 Crores per annum. Total 200 additional manpower is required for expansion project.

8. The PP reported that there is no Wildlife Sanctuary, National Parks, Biosphere Reserves, Tiger/Elephant Reserves, etc. are present within 10 km distance from the project site. Four water bodies are present in 10 Km radius of project site i.e., Sharda Sahayak Khand (adjacent to West Boundary), Shahapur Minor (0.40 Km, E), Drain (0.5 Km, S) and Varuna River (7.38 Km, NE).

9. The PP reported that the Ambient air quality monitoring was carried out during October to December, 2020 and the baseline data indicates the ranges of mean concentrations as: PM10 (41.1-91.4 µg/m3), PM2.5 (18.1-39.4 µg/m3), SO2 (5.2-12.5 µg/m3), NO2 (8.3-24.7 µg/m3) and NH3 (< 20 µg/m3). All parameter concentrations are within the National Ambient Air Quality Standards (NAAQS).

10. The PP reported that the after proposed modernization and expansion, the freshwater requirement of plant will be 35290 KLD. Water will be available from existing bore wells. There is no generation of effluent from manufacturing process of Nano-fertilizer. However, there will be generation of additional 1 KLD wastewater from washing of Vessels/Reactor, etc. and operation of cooling tower in the plant along with 9 KLD domestic sewage generated. It has been proposed to install ETP cum neutralization tank for industrial effluent and 10 KLD of STP for domestic effluent. Treated water shall be reused in the internal Horticulture proposed to be provided in the Nano Plant boundary. Total Industrial and Domestic wastewater shall be 7243 KLD and 2490 KLD, respectively.

11. The total Power requirement after expansion & modernization shall be limited within the existing sanctioned quantity i.e.,53.5 MW. Same is being met by Captive power and Grid Supply. The electrical power generated in CPP is used to fulfill the requirement of entire plant. Plant has 2 nos. of steam turbine driven through Turbo generator viz. TG-1 (Rating 15.625 MVA), TG-2 (Rating-22.5 MVA) and one Gas Turbine Generator (GTG) (Rating-28.125 MVA) in captive power plant. In cases of emergency, a provision has also been made to draw power from UPPCL Grid for which contract demand is 6000 KVA. Existing unit has two no. of DG Sets of Capacity 2700 KVA as standby during power failure. Stack Height of 30 m is provided as per CPCB norms.

12. Existing unit has Natural gas & Coal based 3x125 TPH steam boiler with 100 m stack and 1 x 60 TPH HRSG with 30 m stack. No additional Boiler is proposed. Particulate emission is within the statutory limit given by CPCB & UPPCB.

13. The Project proponent committed that they will abide the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The Onsite and Offsite Emergency plan will be implemented as cited in the provisions of the Rules.

14. Details of Process emissions generation and its management:

S. No.	Stack Attached	Fuel Used	Stack Height	Diameter	APCM	Expected Pollutants	Emission Norms
Existing Process Stacks / Vents							
1	Primary Reformer-I	Natural Gas	33 m	3.6 m	Low NOx Burner	NOx, SO2	NOx < 400 mg/Nm^3
2	Primary Reformer-II	Natural Gas	30 m	2.9 m	Low NOx Burner	NOx, SO2	NOx < 400 mg/Nm^3
3	Prilling Tower-I	-	96 m	22 m	-	PM, NH3	PM<150 mg/Nm^3
4	Prilling Tower-II	-	104 m	26 m	-	PM, NH3	PM<50 mg/Nm^3
Note: No additional Stack is proposed in expansion and there shall be no gaseous							

emission from Nano Fertilizer Plant.

15. Details of solid waste/hazardous waste disposal and process emissions generation and its management are as per the plan provided in the EIA & EMP report and as deliberated in the EAC. The project documents are available on PARIVESH portal which can be accessed at http://parivesh.nic.in.

16. The Project Proponent has also informed the benefits of proposed Nano-Fertilizer Plant, as described below:

(i) Nanotechnology is an emerging field with potential to provide Efficient Nutrient Management as compared to existing fertilizer management practices. With the use of Nanotechnology, the consumption of chemical fertilizer will be reduced.
(ii) Nano Urea reduces fertilizer consumption compared to Conventional Urea. 1No. 500 ml Nano Urea Bottle is equivalent to 45 Kg Urea (1 bag).
(iii) Nano Urea provides Better Nutrient & Increases Production. It also has a Cost Advantage over Conventional Urea.
(iv) It is Environment Friendly and Non-Toxic to Flora & Fauna, Humans.
(v) No source of air emission/effluent generation/hazardous waste generation is involved in the production process. As a matter of fact, the Nano-fertilizer plant will pose an example of Environmental Sustainability and profitability for both farmers and government.
(vi) It will maintain stability in Domestic market for Fertilizer.
(vii) It will reduce the import possibility of Urea fertilizers to some extent and contribute to National saving.
(viii) Nano Fertilizer application improves soil health and reduces the demand of conventional fertilizer like Urea on farmer's field for achieving optimum or targeted crop yields.
(ix) Nano fertilizers enhance the seed germination.
(x) It helps in growth of plant height, leaf area and numbers of leaves per plant.
(xi) Nano fertilizer enhances the chlorophyll production as well as rate of the photosynthesis which result in more production.
(xii) All these factors result in more yield and better-quality parameters derived from usage of Nano-fertilizers as compared to conventional fertilizer usage.
(xiii) It is possible to increase the production of the crop by about 15 to 20 percent.

17. The proposal was considered by the **26th Expert Appraisal Committee (Industry-3 sector) meeting held on 16-17 February 2022** in the Ministry through video conferencing, wherein Project Proponent and their accredited Consultant [M/s EQMS India Pvt. Ltd. having accreditation number NABET/EIA/1922/RA0197 valid till 23.11.2022], presented the EIA & EMP report. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at **http://parivesh.nic.in**.

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 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 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 EIA/EMP reports is in compliance of the TOR and reflect the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The Committee also 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 committee also deliberated on the water balance data and found it satisfactory. The Committee also deliberated the onsite/offsite emergency plan and various mitigation measures to be proposed during implementation of the project.

The Committee deliberated on chemical accident that took place in the Unit earlier. The PP has done the root cause analysis of the accident, EAC deliberated the same and advised the PP to implement the various provisions of the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The Onsite and Offsite Emergency plan will be implemented as cited in the provisions of the Rules.

The EAC suggested to PP to explore the possibility for the usage of Natural gas. The Committee deliberated the Greenbelt design and budget allocation for EMP, water balance, the, Conservation plan for Schedule-I species, storage of nano-urea bottle are found to be satisfactory. The Committee also deliberated the onsite/offsite emergency plan and various mitigation measures to be proposed during implementation of the project.

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.

18. 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.

19. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3 Sector), Ministry of Environment, Forest and Climate change hereby accords **Environmental clearance for Modernization and Expansion of Existing Fertilizer Plant for Manufacturing of Nano Fertilizer with proposed production capacity of 36,500 KLA, located at IFFCO Phulpur, P.O. Ghiyanagar,**

Phulpur, District-Prayagraj, Uttar Pradesh by M/s Indian Farmers Fertilizer Cooperative Limited (IFFCO) under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under: -

A. Specific Conditions:

(i). All conditions stipulated in the earlier EC vide letter no. J J-11011/150/2006-IA II (I) dated 14.07.2006 shall strictly be complied.

(ii). The PP 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.

(iii). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

(iv). The 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.

(v). 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.

(vi). 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.

(vii). 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.

(viii). 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.

(ix). Necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The Project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

(x). 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.

(xi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97% with effective chillers/modern technology.

(xii). Total fresh water requirement shall not exceed 35290 KLD Prior permissions in this regard shall be obtained from the concerned regulatory authority.

(xiii). 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.

(xiv). 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 vapour recovery system. (f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.

(xv). The green belt of at least 5-10 m width shall be developed in nearly 36% of the total project area mainly along the plant periphery/adjacent areas, as committed by the PP. 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. Trees have to be planted with spacing of 2m x 2m and number of trees have to be increased accordingly (2500 trees/hectare). The plant species can be selected that will give better carbon sequestration and plantation shall be completed within six months.

(xvi). As committed by the PP, the project proponent shall explore the usage of natural gas/bio briquettes.

(xvii). The activities and the action plan of the issues raised during public hearing 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. The compliances report shall be submitted to IRO, MoEFCC Lucknow.

(xviii). 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.

B. General Conditions: 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, 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, 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.

(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 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the

respective Integrated Regional Office of MoEF&CC by e-mail.

(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.

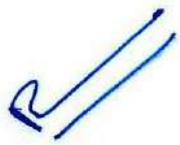
20. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

21. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

22. 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.

23. 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.

24. This issues with approval of the competent authority.



(Dr. R. B. Lal)
Scientist 'E'/Additional Director
Tele-fax: 011-20819346
Email-rb.lal@nic.in

Copy to: -

1. The Deputy DGF (C). MoEF&CC Integrated Regional Office (Uttar Pradesh), Kendriya Bhawan, 5th Floor, Sector "H". Aliganj, Lucknow (UP)-20

2. The Secretary, Department of Environment, Government of Uttar Pradesh, 601, Bapu Bhawan, Secretariat, Vidhan Sabha Marg, Lucknow (UP)-1
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. TC-12V. Vibhuti Khand, Gomti Nagar, Lucknow – 10
5. The Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi - 11
6. The District Collector, District Prayagraj (Uttar Pradesh)
7. Guard File/Monitoring File/Website/Record File/Parivesh Portal

(Dr. R. B. Lal)
Scientist 'E'/Additional Director
Tele-fax: 011-20819346
Email-rb.lal@nic.in

Signature Not Verified
Digitally signed by Dr. R.B. Lal
Scientist E
Date: 3/14/2022 11:57:01 AM

Annexure-VI

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC024123

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000488			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0033
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			N/A
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/08/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/08/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00

Maximum Allowable Annual Extraction of Ground Water: 233	645120

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC044071

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000496			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0034
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	18/04/1997		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		18/04/1997	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00

Maximum Allowable Annual Extraction of Ground Water: 236	660480

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC030251

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000497			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0035
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	11/02/1998		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		11/02/1998	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	14.00

Maximum Allowable Annual Extraction of Ground Water: 239	707840

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

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- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC028389

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000498			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0036
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/08/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/08/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	14.00

Maximum Allowable Annual Extraction of Ground Water: 242	725760

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC030184

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000499			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0037
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	26/08/1997		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		26/08/1997	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00

Maximum Allowable Annual Extraction of Ground Water: 245	691200

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC011480

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000500			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0038
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	14/07/2009		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		14/07/2009	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	10.00

Maximum Allowable Annual Extraction of Ground Water: 248	569600

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC015473

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000501			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0039
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/08/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/08/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00

Maximum Allowable Annual Extraction of Ground Water: 251	633600

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC044370

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000503			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0040
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	16/12/1997		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		16/12/1997	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	16.00

Maximum Allowable Annual Extraction of Ground Water: 254	870400

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC045798

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000505			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0041
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	14/07/2009		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		14/07/2009	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	16.00

Maximum Allowable Annual Extraction of Ground Water: 257	911360

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC014794

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000506			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0042
Date of Submission	23/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	12/08/2009		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		12/08/2009	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	14.00

Maximum Allowable Annual Extraction of Ground Water: 260	698880

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC042585

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000310			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0025
Date of Submission	16/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			N/A
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	27/08/1990		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		27/08/1990	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	10.00

Maximum Allowable Annual Extraction of Ground Water: 263	640000

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC036622

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000462			
Name of the Owner	SANJAY KUDESIA		
Company Name कंपनी का नाम	IFFCO PHULPUR UNIT	**Company Address कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0026
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	06/10/2004		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		06/10/2004	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00
Maximum Allowable Annual Extraction of Ground Water:			652800

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water

at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
  - Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.

- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC037766

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000469			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0027
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	30/07/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		30/07/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	14.00

Maximum Allowable Annual Extraction of Ground Water: 269	761600

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

270

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC011819

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000472			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0028
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/08/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/08/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	16.00

Maximum Allowable Annual Extraction of Ground Water: 272	860160

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC015111

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000476			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0029
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	N/A
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/08/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/08/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	12.00

Maximum Allowable Annual Extraction of Ground Water: 275	683520

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

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- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**19/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC033351

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000479			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0030
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	12/02/2019		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		12/02/2019	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	10.00

Maximum Allowable Annual Extraction of Ground Water: 278	528000

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC031033

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000482			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0031
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	02/03/2018		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		02/03/2018	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	14.00

Maximum Allowable Annual Extraction of Ground Water: 281	797440

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

GROUND WATER DEPARTMENT
(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

[See Rule 8(1)]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC018401

VALID FROM 15/02/2022 TO 14/02/2027

{UIS10(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019}

Registration No.: 202112000484			
Name of the Owner	SANJAY KUDESIA		
Designation **पद**	Executive Director	**Company Name** **कंपनी का नाम**	IFFCO PHULPUR UNIT
Company Address **कंपनी का पता**	Ghiyanagar IFFCO Phulpur Prayagraj	**Authorization Letter** **प्राधिकार पत्र**	Download
Address of the Applicant	IFFCO Ghiyanagar Phulpur Prayagraj	**Application Form Serial No.**	PGRJ1221NIN0032
Date of Submission	22/12/2021	**Specimen Signature**	
Location Particulars			
District	Prayagraj	**Block**	PHULPUR
Plot No./Khasra No.	R2 and R6 dt 1976	**Municipality/Corporation**	No
Ward No./Holding No.			NA
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	06/10/2018		
Type of Well	Tube Well/Boring	**Depth of the Well (In meter)**	200.00
Purpose of well	Industrial	**Assembly Size(For Tube Well)**	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	**H.P. of the Pump**	125.00
Operational Device	Electric Motor	**Rate of Withdrawal (m^3/hr.)**	320.00
Date of Energization (In Case of Electric Pump)		06/10/2018	
Maximum Allowable Rate of Withdrawal (m^3/hr.):	320.00	**Maximum Allowable Running Hours Per Day:**	16.00

Maximum Allowable Annual Extraction of Ground Water: 284	911360

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours per day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage , this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- **Guidelines for Installation of Piezometers and their Monitoring**

  Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

  - The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4” to 6”.
  - The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
  - No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

  - The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
  - For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
  - The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
  - All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
  - The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
  - A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.

- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
-
- **SPECIFIC CONDITIONS:**
- **(A) For Industrial User:** No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m^3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uttar Pradesh. All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m^3 /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 50 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
-
- **(B) Infrastructural User:** The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m^3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

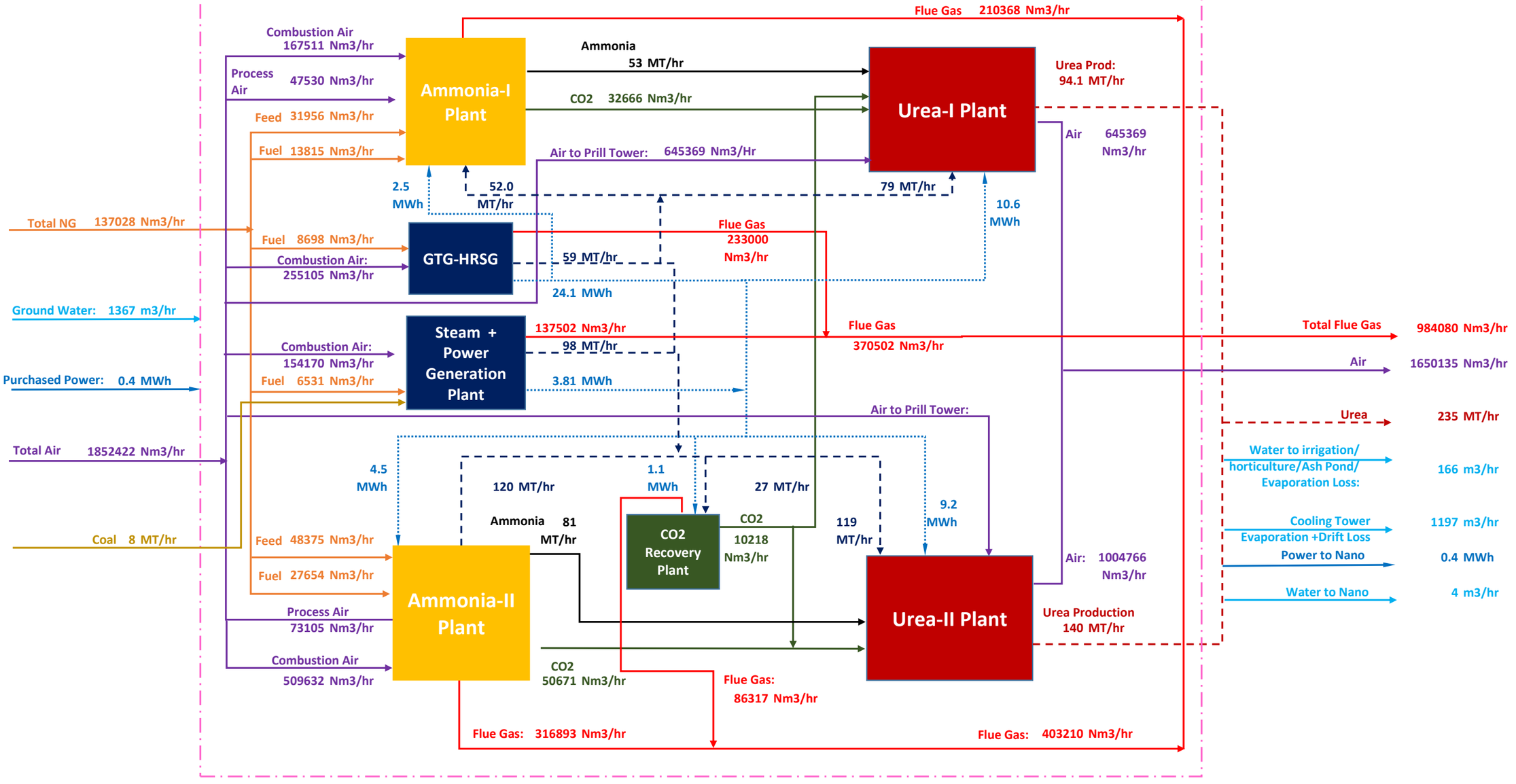
Date :**21/02/2022**

Place:**Prayagraj**

This certificate is electronically generated and does not require digital signature

Overall Material Balance of Phulpur Complex

UREA PRODUCTION 5631 MTPD



105103/2023/DISP-HO

Annexure-VIII

फूलपुर इकाई
PHULPUR UNIT

287

IFFCO

इंडियन फारमर्स फर्टिलाइजर कोआपरेटिव लिमिटेड
INDIAN FARMERS FERTILISER CO-OPERATIVE LTD.

Ref.No.: TE/02/248

Date : 28-04-2023

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
04 MAY 2023
Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

To,

The Regional Office (Central Region)
Ministry of Environment & Forests
Govt. of India
Kendriya Bhawan, 5th Floor,
Sector "H" Alignanj-226024

Sub: Fly Ash Notification S.O. 763 (e) dated 14th September 1999, its amendments S.O. 2804 (E) dated 3rd November 2009 and further amendments S.O. 254 (E) dated 25th January 2016 – Annual Report for the period 01.04.2022 to 31.03.2023.

Dear Sir,

This has reference to subject matter regarding submission of statutory compliance report In this context, please find enclosed herewith Annual Implementation Report of IFFCO Phulpur on Ash Utilization for the year ending 31.03.2023.

Hope the above information would suffice.

Thanking you,

Yours faithfully,
For Indian Farmers Fertiliser Cooperative Ltd.

Sanjay Kudesia

(Sanjay Kudesia)
Sr. Executive Director

Encl· as above

cc: (i) Member Secretary, Central Pollution Control Board, New Delhi.
(ii) Member Secretary, U.P.Pollution Control Board, Lucknow.
(iii) Regional Officer, U.P.Pollution Control Board, Prayagraj.

P.O. Ghiyanagar, Prayagraj-212404 (U.P.) Phone : (05332) 253374,251243
पोस्ट घियानगर, प्रयागराज–212404 (उ0प्र0) फोन (05332) 253374, 251243

तार / Gram : इफको घियानगर, IFFCO Ghiyanagar, फैक्स / Fax : General - (05332) 251252, Maintenance (05332) 251263
ईमेल / E-Mail - phulpur@iffco.in वेबसाइट / Website : www.iffco.in

Fly Ash Notification S.O. 763 (e) dated 14th September 1999, its amendments S.O. 2804 (E) dated 3rd November 2009 and further amendments S.O. 254 (E) dated 25th January 2016 – Annual Report for the period 01.04.2022 to 31.03.2023.

S.No.	Name of Power Utility	No. of TPS	Installed Capacity (MW)	Ash Generation (2022-2023) (Million Tone)	Ash Utilization (2022-2023) (Million Tone)	Percentage Utilization (2022– 2023) %
1	Steam Generation and Power Generation Plant. (Indian Farmers Fertiliser Cooperative Ltd. Phulpur Unit)	Unit-I Unit-II Gas Turbine	12.5 (Coal Based) 18.0 23.0	0.04025 - -	(i) From ESP Dry Ash (Sold) 0.03410 (ii) From Ash Pond (Free) 0.04852 (iii) In Own Brick Unit 0.00055 Total = 0.08317	206.63

Date: 28/04/2023

Signature: [signature]

Designation: Jt. General Manager (Utility)

M .D. Mishra
Joint General Manager (Utility)
IFFCO, Phulpur Unit
Post ..., Prayagraj-212404

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/1/1	Issue No. : 01	Date of Issue : 16.08.2022	Page No. : 1 of 1
Amendment no. : 00/05	Amendment Date: 00	Approved by : TM	Issued by: QM

पिकप भवन , विभूति खण्ड, गोमती नगर, लखनऊ
फ़ोन : 0522 : 4087600, 4087700
फैक्स : 0522 : 4087602

PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow
Phone : 0522- 4087600, 4087700
Fax : 0522 - 4087602

Fresh water

TEST REPORT

S.No: F/2023/242

	Date of test report:01/11/2023	Date/period of testing:20-29/10/2023
1	परियोजना /Project/Test Programme	NGT Matter
2	नमूने का स्त्रोत /भूजल /सरिता /अन्य/Sample Source (GW/River/any other)	GW at Industry
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.						
			IPW	IPX	IPY	B26	IFFVGP	IFFVA	1GE
1.	पी एच/ pH		6.93 (28.1°C)	7.21 (28.9°C)	7.22 (28.2°C)	7.24 (28.8°C)	7.67 (28.1°C)	NA	NA
2.	रंग/ Colour	हैज़न/ Hazen	05	05	05	05	10	NA	NA
3.	चालकता/ Conductivity	मा.सिमेन/से.मी/ µ S/cm	821	719	714	872	1059	NA	NA
4.	टी डी एस/ T D S	मि.ग्रा./ली. mg/L	547	434	450	478	558	NA	NA
5.	कुल कठोरता/ Total Hardness	मि.ग्रा./ली. mg/L	309	230	310	365	475	NA	NA
6.	कैल्शियम/ Calcium as Ca^{2+}	मि.ग्रा./ली. mg/L	113	84.0	109	130	179	NA	NA
7.	मैग्नीशियम/ Magnesium as Mg^{2+}	मि.ग्रा./ली. mg/L	6.3	4.6	9.4	9.7	7.0	NA	NA
8.	सोडियम / Sodium Na^{+}	मि.ग्रा./ली. mg/L	336	311	312	310	302	NA	NA
9.	पोटेशियम/ K^{+}	मि.ग्रा./ली. mg/L	3.08	2.68	3.36	4.29	4.57	NA	NA
10.	क्लोराइड/ Chloride as Cl^{-}	मि.ग्रा./ली. mg/L	46.7	50.1	21.3	58.7	53.3	NA	NA
11.	फ्लोराइड/ Floride as F^{-}	मि.ग्रा./ली. mg/L	BDL	BDL	BDL	BDL	0.639	NA	NA
12.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	68.5	63.1	39.2	42.3	45.8	NA	NA
13.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	0.08	2.63	2.47	0.59	2.69	NA	NA
14.	नाइट्रेट/ Nitrate (NO_3^{-})	मि.ग्रा./ली. mg/L	3.45	2.53	7.98	6.30	BDL	NA	NA
15.	नाइट्राइट/ Nitrite (NO_2^{-})	मि.ग्रा./ली. mg/L	BDL	BDL	BDL	BDL	BDL	NA	NA
16.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	BDL	BDL	BDL	NA	NA	BDL	BDL
17.	एल्कलिनिटी/ Alkalinity	मि.ग्रा./ली. mg/L	445	303	423	401	523	NA	NA
18.	कार्बोनेट/ Carbonate	मि.ग्रा./ली. mg/L	0.0	0.0	0.0	0.0	0.0	NA	NA
19.	बाई-कार्बोनेट/ Bi-Carbonate	मि.ग्रा./ली. mg/L	445	303	423	401	523	NA	NA
20.	सी ओ डी / C O D	मि.ग्रा./ली. mg/L	9.43	6.64	BDL	7.81	8.44	NA	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*

Note: NA represents Not Applicable.

CODE	Description
IPW	Groundwater of Industry
IPX	Groundwater of Industry
IPY	Groundwater of Industry
B26	Groundwater of Industry
IFFVGP	Groundwater of Industry
IFFVA	Groundwater of Industry
1GE	Groundwater of Industry

End of Test Report

01/11/23
(Rakesh Kumar Saxena)
आख्या बनाने वाले के हस्ताक्षर/Prepared by (Name & Sign)

01/11/23
(डॉ0 अनामिका सिंह)
वैज्ञानिक 'ग' एवं प्रभारी प्रयोगशाला
के0 प्र0 नि0 बोर्ड, लखनऊ
अधिकृत हस्ताक्षरकर्ता/Authorized Signatory

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rdEd. 2017	5 – 100 Hazen
Conductivity	APHA 2510-B, 23rdEd. 2017	0.1 µS/cm -12mS/cm
pH	APHA 4500 H^+-B, 23rdEd. 2017	2- 12
Total Dissolved Solids	APHA 2540 C, 23rdEd. 2017	2.5 mg/L – 5000 mg/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rdEd. 2017	5 mg/L – 500 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rdEd. 2017 4500 OC, 23rdEd. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	1.0 mg/L – 50 mg/L
Nitrate	APHA 4500 NO_3-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L -265 mg/L
Nitrite	APHA 4500-NO_2-B, 23rd Ed. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rd Ed. 2017 (Phenate Method)	0.1 mg/L- 50 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L- 250 mg/L
Phosphate	APHA 4500-PD, 23rd Ed. 2017	0.06 mg/L- 184 mg/L
Chloride	APHA 4500-Cl B, 23rd Ed. 2017	3.0 mg/L- 2000 mg/L
Fluoride	APHA 4500-F C, 23rd Ed. 2017 (Ion Selective Electrode Method)	0.5 - 10 mg/L
Calcium	APHA 3500-Ca B, 23rd Ed. 2017	2.0 mg/L-1000 mg/L
Sodium	APHA 3500-Na B, 23rd Ed. 2017	1.0mg/L - 100 mg/L
Potassium	APHA 3500-K B, 23rd Ed. 2017	1.0 mg/L- 50 mg/L
Magnesium	APHA 3500-Mg B, 23rd Ed. 2017	2.0 mg/L- 500 mg/L
Hardness Total	APHA 2340-C, 23rd Ed. 2017	5.0 - 2000mg/L
Alkalinity	APHA 2320-B, 23rd Ed. 2017	2.0 mg/L- 2500 mg/L

1. APHA - American Public Health Association
2. IS – Indian Standard

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/2/1	Issue No. : 01	Dt of Issue : 16.08.2022	Page No. : 1 of 1
Amendment no. : 00/05	Amendment Dt: 00	Approved by : TM	Issued by: QM

पिकप भवन , विभूति खण्ड, गोमती नगर, लखनऊ
फ़ोन % 0522 % 4087600,4087700
फैक्स % 0522 % 4087602

PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow
Phone : 0522- 4087600,4087700
Fax : 0522 - 4087602

S.No. W/2023/306

WASTEWATER
TEST REPORT

	Date of test report:01/11/2023	Date/period of testing:20-31/10/2023
1	परियोजना /Project/Test Programme	NGT Matter
2	नमूने का स्त्रोत /भूजल /सरिता /अन्य/Sample Source (STP/ETP/Drain/any other)	Industry Effluent
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.							
			IPA	IPC	IPD	IPE	IPG	IPH	IPI	IPJ
1.	पी एच/ pH		7.36 (28.4°C)	6.60 (28.0°C)	6.01 (28.3°C)	7.35 (28.4°C)	NA	7.50 (28.4°C)	9.71 (28.7°C)	10.0 (28.8°C)
2.	पी एच/ pH*		7.00 (33.0°C)	6.00 (35.0°C)	6.00 (33.0°C)	7.00 (39.0°C)	8.00 (29.0°C)	7.00 (29.0°C)	10.0 (40.0°C)	9.00 (88.0°C)
3.	रंग/ Colour	हैज़न/ Hazen	15	10	20	15	NA	15	15	10
4.	एस.एस./ SS	मि.ग्रा./ली. mg/L	8.64	BDL	5.57	4.76	NA	3.38	55.7	BDL
5.	टी.डी.एस./ T D S	मि.ग्रा./ली. mg/L	2897	240	8190	3092	NA	2427	462	393
6.	एम.एल.एस.एस/ MLSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
7.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
8.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	1284	66.2	3379	431	NA	402	111	57.6
9.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	3.82	0.06	0.11	1.90	NA	0.13	0.49	0.12
10.	नाइट्रेट/ Nitrate (NO_3^-)	मि.ग्रा./ली. mg/L	87.2	20.2	198	49.8	NA	39.8	5.22	32.6
11.	नाइट्राइट/ Nitrite (NO_2^-)	मि.ग्रा./ली. mg/L	1.93	2.94	1.77	1.71	NA	1.74	BDL	1.10
12.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	1.59	0.59	13.9	56.8	120	22.7	4.43	120
13.	मुक्त अमोनिया / Free Ammonia**	मि.ग्रा./ली. mg/L	0.020	0.000	0.016	0.961	10.3	2.19	5.03	62.5#
14.	टी.के.एन./ T.K.N.	मि.ग्रा./ली. mg/L	26.5	2.23	14.2	57.7	344	23.4	640	137
15.	ऑयल व ग्रीस/ Oil & Grease	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
16.	सी.ओ.डी. / C O D	मि.ग्रा./ली. mg/L	35.1	5.74	97.9	135	NA	90.5	217	103
17.	बी.ओ.डी. / B O D	मि.ग्रा./ली. mg/L	13.7	BDL	18.0	11.0	NA	29.6	116	59.0
18.	कुल कॉलीफोर्म /T-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA
19.	फीकल कॉलीफोर्म/F-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*
Note: NA represents Not Applicable.

*Analysed/measured at site by sampling team, **Free Ammonia Calculation is based on field parameters (pH & Temp.), #Field pH & Laboratory Temperature have been considered for calculating Free Ammonia.

CODE	Description
IPA	Industry Effluent
IPC	Industry Effluent
IPD	Industry Effluent
IPE	Industry Effluent
IPG	Industry Effluent
IPH	Industry Effluent
IPI	Industry Effluent
IPJ	Industry Effluent

End of Test Report

01/11/23

Anamika 01/11/23
(डॉ0 अनामिका सिंह)
वैज्ञानिक 'ग' एवं प्रभारी प्रयोगशाला

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rdEd. 2017	5 – 20000 Hazen
pH	APHA 4500 H^+-B, 23rdEd. 2017	2- 12
Suspended solids	APHA 2540 D, 23rd Ed. 2017	2.5 mg/L -10,000 mg/L
Total Dissolved Solids	APHA 2540 C, 23rd Ed. 2017	2.5 mg/L- 100 g/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rd Ed. 2017	5 mg/L - 100000 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rd Ed. 2017 4500 OC, 23rd Ed. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	5.0 mg/L - 50000 mg/L
Nitrate	APHA 4500 NO_3^-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L - 442 mg/L
Nitrite	APHA 4500-NO_2-B, 23rdEd. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rdEd. 2017 (Phenate Method)	0.5mg/L- 200 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L - 500 mg/L
Phosphate	APHA 4500-PD, 23rdEd. 2017	1.5 mg/L- 307 mg/L
Oil and grease	APHA 5520-B, 23rdEd. 2017	5 - 1000 mg/L
TKN	APHA 4500-N_{org} B, 23rd Ed. 2017	0.5 mg/L - 80 mg/L
Total Coliform	APHA 23rd Ed. 2017, 9221-A,B &C	1.8 - >1600 MPN/100 mL
Fecal Coliform	APHA 23rd Ed. 2017, 9221-C (2), 9221 E	1.8 - >1600 MPN/100 mL

1. APHA – American Public Health Association
2. IS – Indian Standard

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/2/1	Issue No. : 01	Dt of Issue : 16.08.2022	Page No. : 1 of 1
Amendment no. : 00/05	Amendment Dt: 00	Approved by : TM	Issued by: QM

पिकप भवन , विभूति खण्ड, गोमती नगर, लखनऊ
फ़ोन % 0522 % 4087600,4087700
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PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow
Phone : 0522- 4087600,4087700
Fax : 0522 - 4087602

WASTEWATER
TEST REPORT

S.No. W/2023/306

	Date of test report:01/11/2023	Date/period of testing:20-31/10/2023
1	परियोजना /Project/Test Programme	NGT Matter
2	नमूने का स्रोत /भूजल /सरिता /अन्य/Sample Source (STP/ETP/Drain/any other)	Industry Effluent
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.							
			IPF	IPO	IPP	IPQ	IPR	IPS	IPT	IPU
1.	पी एच/ pH		7.90 (28.2°C)	9.31 (28.1°C)	7.80 (28.4°C)	7.49 (28.2°C)	7.64 (28.2°C)	9.28 (28.4°C)	8.70 (28.4°C)	8.16 (28.0°C)
2.	पी एच/ pH*		7.00 (28.0°C)	9.00 (33.0°C)	7.00 (58.0°C)	7.00 (35.0°C)	7.00 (28.0°C)	7.00 (33.0°C)	7.00 (26.0°C)	7.00 (29.0°C)
3.	रंग/ Colour	हैज़न/ Hazen	25	25	20	05	05	10	15	05
4.	एस.एस./ SS	मि.ग्रा./ली. mg/L	7.59	9.27	2.76	BDL	5.67	83.4	BDL	BDL
5.	टी.डी.एस./ T D S	मि.ग्रा./ली. mg/L	1908	288	379	943	689	966	742	1108
6.	एम.एल.एस.एस/ MLSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
7.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
8.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	614	42.7	78.6	210	71.7	105	127	286
9.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	2.28	0.71	1.05	2.63	1.28	2.41	0.57	0.92
10.	नाइट्रेट/ Nitrate (NO_3^-)	मि.ग्रा./ली. mg/L	56.5	5.09	BDL	34.4	4.69	BDL	BDL	20.0
11.	नाइट्राइट/ Nitrite (NO_2^-)	मि.ग्रा./ली. mg/L	2.23	0.22	2.72	3.13	BDL	2.10	BDL	2.88
12.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	10.9	35.1	1.83	2.26	7.86	1.86	BDL	3.76
13.	मुक्त अमोनिया / Free Ammonia**	मि.ग्रा./ली. mg/L	0.105	21.0	0.02#	0.033	0.075	0.024	0.000	0.036
14.	टी.के.एन./ T.K.N.	मि.ग्रा./ली. mg/L	12.3	442	1.95	2.79	8.64	11.2	3.06	8.09
15.	ऑयल व ग्रीस/ Oil & Grease	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
16.	सी.ओ.डी. / C O D	मि.ग्रा./ली. mg/L	43.6	91.5	39.5	16.9	29.4	42.2	19.2	23.9
17.	बी.ओ.डी. / B O D	मि.ग्रा./ली. mg/L	9.67	33.0	15.1	5.90	12.9	25.9	BDL	5.24
18.	कुल कॉलीफोर्म /T-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA
19.	फीकल कॉलीफोर्म/F-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*
Note: NA represents Not Applicable.

*Analysed/measured at site by sampling team, **Free Ammonia Calculation is based on field parameters (pH & Temp.), #Field pH & Laboratory Temperature have been considered for calculating Free Ammonia.

CODE	Description
IPF	Industry Effluent
IPO	Industry Effluent
IPP	Industry Effluent
IPQ	Industry Effluent
IPR	Industry Effluent
IPS	Industry Effluent
IPT	Industry Effluent
IPU	Industry Effluent

End of Test Report

01/11/23

Anamika 01/11/23
(डॉ0 अनामिका सिंह)
वैज्ञानिक 'ग' एवं प्रभारी प्रयोगशाला

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rdEd. 2017	5 – 20000 Hazen
pH	APHA 4500 H^+-B, 23rdEd. 2017	2- 12
Suspended solids	APHA 2540 D, 23rd Ed. 2017	2.5 mg/L -10,000 mg/L
Total Dissolved Solids	APHA 2540 C, 23rd Ed. 2017	2.5 mg/L- 100 g/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rd Ed. 2017	5 mg/L - 100000 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rd Ed. 2017 4500 OC, 23rd Ed. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	5.0 mg/L - 50000 mg/L
Nitrate	APHA 4500 NO_3^-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L - 442 mg/L
Nitrite	APHA 4500-NO_2-B, 23rdEd. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rdEd. 2017 (Phenate Method)	0.5mg/L- 200 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L - 500 mg/L
Phosphate	APHA 4500-PD, 23rdEd. 2017	1.5 mg/L- 307 mg/L
Oil and grease	APHA 5520-B, 23rdEd. 2017	5 - 1000 mg/L
TKN	APHA 4500-N_{org} B, 23rd Ed. 2017	0.5 mg/L - 80 mg/L
Total Coliform	APHA 23rd Ed. 2017, 9221-A,B &C	1.8 - >1600 MPN/100 mL
Fecal Coliform	APHA 23rd Ed. 2017, 9221-C (2), 9221 E	1.8 - >1600 MPN/100 mL

1. APHA – American Public Health Association
2. IS – Indian Standard

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/2/1	Issue No. : 01	Dt of Issue : 16.08.2022	Page No. : 1 of 1
Amendment no. : 00/05	Amendment Dt: 00	Approved by : TM	Issued by: QM

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Fax : 0522 - 4087602

S.No. W/2023/306

WASTEWATER
TEST REPORT

	Date of test report:01/11/2023	Date/period of testing:20-31/10/2023
1	परियोजना /Project/Test Programme	NGT Matter
2	नमूने का स्त्रोत /भूजल /सरिता /अन्य/Sample Source (STP/ETP/Drain/any other)	Industry Effluent
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.							
			IPB	IFCPG-1	IFCPG-2	IFSTG-1	IFSTG-2	IFROG	IFCTG	IFAPGP
1.	पी एच/ pH		6.83 (28.4°C)	9.48 (28.6°C)	7.33 (28.7°C)	10.1 (28.8°C)	8.16 (28.2°C)	7.43 (28.1°C)	10.1 (28.1°C)	7.95 (28.9°C)
2.	रंग/ Colour	हैज़न/ Hazen	05	05	05	05	05	05	05	05
3.	एस.एस./ SS	मि.ग्रा./ली. mg/L	BDL	BDL	BDL	23.5	3.02	BDL	31.4	13.5
4.	टी.डी.एस./ T D S	मि.ग्रा./ली. mg/L	2713	18.0	BDL	362	548	393	360	1570
5.	एम.एल.एस.एस/ MLSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
6.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
7.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	1279	11.6	BDL	70.0	55.2	53.7	72.3	281
8.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	0.11	0.08	0.38	0.06	0.46	0.08	0.12	0.04
9.	नाइट्रेट/ Nitrate (NO_3^-)	मि.ग्रा./ली. mg/L	75.6	BDL	BDL	4.96	7.17	13.8	5.68	36.6
10.	नाइट्राइट/ Nitrite (NO_2^-)	मि.ग्रा./ली. mg/L	2.43	BDL	BDL	BDL	2.56	2.68	BDL	1.90
11.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
12.	मुक्त अमोनिया / Free Ammonia	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
13.	टी.के.एन./ T.K.N.	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
14.	ऑयल व ग्रीस/ Oil & Grease	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
15.	सी.ओ.डी. / C O D	मि.ग्रा./ली. mg/L	42.9	78.4	67.6	10.5	8.44	13.5	14.5	50.3
16.	बी.ओ.डी. / B O D	मि.ग्रा./ली. mg/L	6.73	43.7	36.7	BDL	BDL	BDL	BDL	6.27
17.	कुल कॉलीफोर्म /T-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA
18.	फीकल कॉलीफोर्म/F-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*
Note: NA represents Not Applicable.

CODE	Description
IPB	Industry Effluent
IFCPG-1	Industry Effluent
IFCPG-2	Industry Effluent
IFSTG-1	Industry Effluent
IFSTG-2	Industry Effluent
IFROG	Industry Effluent
IFCTG	Industry Effluent
IFAPGP	Industry Effluent

End of Test Report

01/11/23
(Rakesh Kumar Saxena)
आख्या बनाने वाले के हस्ताक्षर/Prepared by (Name & Sign)

Anamika 01/11/23
(डॉ0 अनामिका सिंह)
वैज्ञानिक 'ग' एवं प्रभारी प्रयोगशाला
के0 प्र0 नि0 बोर्ड, लखनऊ
अधिकृत हस्ताक्षरकर्ता/Authorized Signatory

Note : 1. The results in the Test Report relate only to the items tested ; 2. The report shall not be reproduced except in full, without the written permission of laboratory

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rdEd. 2017	5 – 20000 Hazen
pH	APHA 4500 H^+-B, 23rdEd. 2017	2- 12
Suspended solids	APHA 2540 D, 23rd Ed. 2017	2.5 mg/L -10,000 mg/L
Total Dissolved Solids	APHA 2540 C, 23rd Ed. 2017	2.5 mg/L- 100 g/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rd Ed. 2017	5 mg/L - 100000 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rd Ed. 2017 4500 OC, 23rd Ed. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	5.0 mg/L - 50000 mg/L
Nitrate	APHA 4500 NO_3^-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L - 442 mg/L
Nitrite	APHA 4500-NO_2-B, 23rdEd. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rdEd. 2017 (Phenate Method)	0.5mg/L- 200 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L - 500 mg/L
Phosphate	APHA 4500-PD, 23rdEd. 2017	1.5 mg/L- 307 mg/L
Oil and grease	APHA 5520-B, 23rdEd. 2017	5 - 1000 mg/L
TKN	APHA 4500-N_{org} B, 23rd Ed. 2017	0.5 mg/L - 80 mg/L
Total Coliform	APHA 23rd Ed. 2017, 9221-A,B &C	1.8 - >1600 MPN/100 mL
Fecal Coliform	APHA 23rd Ed. 2017, 9221-C (2), 9221 E	1.8 - >1600 MPN/100 mL

1. **APHA – American Public Health Association**
2. **IS – Indian Standard**

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/2/1	Issue No. : 01	Dt of Issue : 16.08.2022	Page No. : 1 of 1
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WASTEWATER
TEST REPORT

S.No. W/2023/306

	Date of test report:01/11/2023	Date/period of testing:20-31/10/2023
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3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.							
			2ABK	IPV	IFCPA-2	IFSTA-1	IFSTA-2	IFRDA	IFCTA	IFAPA
1.	पी एच/ pH		7.24 (28.6°C)	7.15 (28.6°C)	NA	NA	NA	NA	NA	NA
2.	पी एच/ pH*		NA	7.00 (30.0°C)	7.00 (29.0°C)	10.0 (29.0°C)	8.00 (31.0°C)	6.00 (33.0°C)	10.0 (29.0°C)	6.50 (28.0°C)
3.	रंग/ Colour	हैज़न/ Hazen	40	10	NA	NA	NA	NA	NA	NA
4.	एस.एस./ SS	मि.ग्रा./ली. mg/L	34.0	22.8	NA	NA	NA	NA	NA	NA
5.	टी.डी.एस./ T D S	मि.ग्रा./ली. mg/L	631	3023	NA	NA	NA	NA	NA	NA
6.	एम.एल.एस.एस/ MLSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
7.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	NA	NA	NA
8.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	38.6	NA	NA	NA	NA	NA	NA	NA
9.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	2.17	0.80	NA	NA	NA	NA	NA	NA
10.	नाइट्रेट/ Nitrate (NO_3^-)	मि.ग्रा./ली. mg/L	3.10	6.50	NA	NA	NA	NA	NA	NA
11.	नाइट्राइट/ Nitrite (NO_2^-)	मि.ग्रा./ली. mg/L	1.17	1.60	NA	NA	NA	NA	NA	NA
12.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	NA	33.1	BDL	BDL	3.09	BDL	BDL	10.2
13.	मुक्त अमोनिया / Free Ammonia**	मि.ग्रा./ली. mg/L	NA	0.359	0.000	0.128	0.298	0.000	0.191	0.024
14.	टी.के.एन./ T.K.N.	मि.ग्रा./ली. mg/L	NA	52.7	BDL	2.51	4.18	0.837	1.12	16.5
15.	ऑयल व ग्रीस/ Oil & Grease	मि.ग्रा./ली. mg/L	NA	9.56	NA	NA	NA	NA	NA	NA
16.	सी.ओ.डी./ C O D	मि.ग्रा./ली. mg/L	30.4	211	NA	NA	NA	NA	NA	NA
17.	बी.ओ.डी. / B O D	मि.ग्रा./ली. mg/L	9.70	48.0	NA	NA	NA	NA	NA	NA
18.	कुल कॉलीफोर्म /T-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA
19.	फीकल कॉलीफोर्म/F-Coliforms	MPN/100ml	NA	NA	NA	NA	NA	NA	NA	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*
Note: NA represents Not Applicable.
*Analysed/measured at site by sampling team, **Free Ammonia Calculation is based on field parameters (pH & Temp.).

CODE	Description
2ABK	Industry Effluent
IPV	Industry Effluent
IFCPA-2	Industry Effluent
IFSTA-1	Industry Effluent
IFSTA-2	Industry Effluent
IFRDA	Industry Effluent
IFCTA	Industry Effluent
IFAPA	Industry Effluent

End of Test Report

01/11/23

Anamika 01/11/23
(डॉ० अनामिका सिंह)

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rd Ed. 2017	5 – 20000 Hazen
pH	APHA 4500 H^+-B, 23rd Ed. 2017	2- 12
Suspended solids	APHA 2540 D, 23rd Ed. 2017	2.5 mg/L -10,000 mg/L
Total Dissolved Solids	APHA 2540 C, 23rd Ed. 2017	2.5 mg/L- 100 g/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rd Ed. 2017	5 mg/L - 100000 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rd Ed. 2017 4500 OC, 23rd Ed. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	5.0 mg/L - 50000 mg/L
Nitrate	APHA 4500 NO_3^-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L - 442 mg/L
Nitrite	APHA 4500-NO_2-B, 23rdEd. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rdEd. 2017 (Phenate Method)	0.5mg/L- 200 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L - 500 mg/L
Phosphate	APHA 4500-PD, 23rdEd. 2017	1.5 mg/L- 307 mg/L
Oil and grease	APHA 5520-B, 23rdEd. 2017	5 - 1000 mg/L
TKN	APHA 4500-N_{org} B, 23rd Ed. 2017	0.5 mg/L - 80 mg/L
Total Coliform	APHA 23rd Ed. 2017, 9221-A,B &C	1.8 - >1600 MPN/100 mL
Fecal Coliform	APHA 23rd Ed. 2017, 9221-C (2), 9221 E	1.8 - >1600 MPN/100 mL

1. APHA – American Public Health Association
2. IS – Indian Standard

केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/7.8/2/1	Issue No. : 01	Dt of Issue : 16.08.2022	Page No. : 1 of 1
Amendment no. : 00/05	Amendment Dt: 00	Approved by : TM	Issued by: QM

पिकप भवन , विभूति खण्ड, गोमती नगर, लखनऊ
फ़ोन % 0522 % 4087600,4087700
फैक्स % 0522 % 4087602

PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow
Phone : 0522- 4087600,4087700
Fax : 0522 - 4087602

WASTEWATER
TEST REPORT

S.No. W/2023/306

	Date of test report:01/11/2023	Date/period of testing:20-31/10/2023
1	परियोजना /Project/Test Programme	NGT Matter
2	नमूने का स्रोत /भूजल /सरिता /अन्य/Sample Source (STP/ETP/Drain/any other)	Industry Effluent
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Rajesh Kumar, RA & Sh. Anand Mishra, SA
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	17-18/10/2023
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	20/10/2023
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/7.3/2 & CB/ZLN/SOP/B/7.4/2 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. A.K. Tripathi, Scientist 'C'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.					
			IFCPA-1	F4DC	IPK	IPM	IPN	IPL
1.	पी एच/ pH		NA	NA	7.36 (28.0°C)	8.10 (27.8°C)	8.32 (27.3°C)	NA
2.	पी एच/ pH*		7.00 (29.0°C)	8.00 (29.0°C)	6.00 (26.0°C)	7.00 (28.0°C)	6.00 (28.0°C)	NA
3.	रंग/ Colour	हैज़न/ Hazen	NA	NA	10	10	10	NA
4.	एस.एस./ SS	मि.ग्रा./ली. mg/L	NA	NA	BDL	2.76	3.06	NA
5.	टी.डी.एस./ T D S	मि.ग्रा./ली. mg/L	NA	NA	626	674	680	NA
6.	एम.एल.एस.एस/ MLSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	4015
7.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्रा./ली. mg/L	NA	NA	NA	NA	NA	1930
8.	सल्फेट/ Sulphate as SO_4^{2-}	मि.ग्रा./ली. mg/L	NA	NA	92.9	96.5	114	NA
9.	फॉस्फेट/ Phosphate (PO_4^{-3})	मि.ग्रा./ली. mg/L	NA	NA	2.65	3.81	2.68	NA
10.	नाइट्रेट/ Nitrate (NO_3^-)	मि.ग्रा./ली. mg/L	NA	NA	BDL	28.2	30.7	NA
11.	नाइट्राइट/ Nitrite (NO_2^-)	मि.ग्रा./ली. mg/L	NA	NA	BDL	BDL	BDL	NA
12.	अमोनिकल नाइट्रोजन/ Ammonical Nitrogen (NH_3-N)	मि.ग्रा./ली. mg/L	5.27	0.63	6.74	BDL	BDL	NA
13.	मुक्त अमोनिया / Free Ammonia**	मि.ग्रा./ली. mg/L	0.050	0.541	0.007	0.002	0.000	NA
14.	टी.के.एन./ T.K.N.	मि.ग्रा./ली. mg/L	5.86	2.23	6.97	0.837	BDL	NA
15.	ऑयल व ग्रीस/ Oil & Grease	मि.ग्रा./ली. mg/L	NA	NA	NA	BDL	NA	NA
16.	सी.ओ.डी./ C O D	मि.ग्रा./ली. mg/L	NA	NA	51.7	11.8	6.76	NA
17.	बी.ओ.डी. / B O D	मि.ग्रा./ली. mg/L	NA	NA	23.2	BDL	BDL	NA
18.	कुल कॉलीफोर्म /T-Coliforms	MPN/100ml	NA	NA	NA	$7.9x10^4$	$1.3x10^4$	NA
19.	फीकल कॉलीफोर्म/F-Coliforms	MPN/100ml	NA	NA	NA	$1.7x10^4$	$4.5x10^3$	NA

विश्लेषण विधि हेतु कृ.प.उ./*Test methods followed are appended overleaf*
Note: NA represents Not Applicable.
*Analysed/measured at site by sampling team, **Free Ammonia Calculation is based on field parameters (pH & Temp.).

CODE	Description
IFCPA-1	Industry Effluent
F4DC	Industry Effluent
IPK	Sewage
IPM	Sewage
IPN	Sewage
IPL	Sewage

End of Test Report

01/11/23
(Rakesh Kumar Saxena)
आख्या बनाने वाले के हस्ताक्षर/Prepared by (Name & Sign)

01/11/23
(डॉ0 अनामिका सिंह)
वैज्ञानिक 'ग' एवं प्रभारी प्रयोगशाला
के0 प्र0 नि0 बोर्ड, लखनऊ
अधिकृत हस्ताक्षरकर्ता/Authorized Signatory

Parameters	Test Method	Detection Range
Colour	APHA 2120-B, 23rd Ed. 2017	5 – 20000 Hazen
pH	APHA 4500 H^+-B, 23rd Ed. 2017	2- 12
Suspended solids	APHA 2540 D, 23rd Ed. 2017	2.5 mg/L -10,000 mg/L
Total Dissolved Solids	APHA 2540 C, 23rd Ed. 2017	2.5 mg/L- 100 g/L
Chemical Oxygen Demand (COD)	APHA 5220 B, 23rd Ed. 2017	5 mg/L - 100000 mg/L
Biochemical Oxygen demand (BOD)	APHA 5210 B, 23rd Ed. 2017 4500 OC, 23rd Ed. 2017 IS-3025 part 44; 1993 Biochemical Oxygen Demand	5.0 mg/L - 50000 mg/L
Nitrate	APHA 4500 NO_3-D, 23rdEd. 2017, (Nitrate Electrode Method)	2.2 mg/L - 442 mg/L
Nitrite	APHA 4500-NO_2-B, 23rdEd. 2017	0.16 mg/L-164 mg/L
Ammonical Nitrogen	APHA 4500-NH_3-F, 23rdEd. 2017 (Phenate Method)	0.5mg/L- 200 mg/L
Sulphate	APHA 4500-SO_4^{2-} E, 23rd Ed. 2017	2.0 mg/L - 500 mg/L
Phosphate	APHA 4500-PD, 23rdEd. 2017	1.5 mg/L- 307 mg/L
Oil and grease	APHA 5520-B, 23rdEd. 2017	5 - 1000 mg/L
TKN	APHA 4500-N_{org} B, 23rd Ed. 2017	0.5 mg/L - 80 mg/L
Total Coliform	APHA 23rd Ed. 2017, 9221-A,B &C	1.8 - >1600 MPN/100 mL
Fecal Coliform	APHA 23rd Ed. 2017, 9221-C (2), 9221 E	1.8 - >1600 MPN/100 mL

1. **APHA – American Public Health Association**
2. **IS – Indian Standard**

Regional Office UP Pollution Control Board, Prayagraj

Analysis Report

Sample Collected By	NGT Team (UPPCB+CPCB)
Sampling Date	17&18 Oct 2023

			Sampling Points									
			GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	GW9	IFGW
S. No	Parameters	Unit										
1.	pH	---	7.72	7.04	6.89	7.01	7.17	7.02	7.24	6.75	6.92	6.82
2.	Color	(Hazen)	10	10	10	10	10	10	10	10	15	10
3.	Conductivity	(μS^{-1})	690	1830	1420	2900	1000	3900	900	1890	1940	950
4.	Total Hardness	(mg/L)	220	520	444	648	512	760	460	680	552	368
5.	Total Alkalinity	(mg/L)	464	576	364	436	508	804	428	340	468	464
6.	TDS	(mg/L)	400.2	1061.4	823.6	1682	580	2262	522	1096.2	1125.2	551
7.	COD	(mg/L)	16	8	12	8	8	12	20	16	16	48
8.	Ammonical Nitrogen	(mg/L)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9.	Chloride	(mg/L)	1.4	28.63	20.02	60.06	6.40	71.47	8.60	52.85	38.44	8.60
10.	Fluoride	(mg/L)	0.46	0.51	0.56	0.43	0.38	0.39	0.42	0.36	0.34	0.38
11.	Ca^{2+}	(mg/L)	30.4	80	84.8	97.6	62.4	132.8	46.4	148.8	116.8	139.2
12.	Mg^{2}	(mg/L)	34.9	77.7	56.3	96.6	86.5	104.0	83.5	74.8	63.1	4.86
13.	Carbonate	(mg/L)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
14.	Bicarbonate	(mg/L)	56.6	70.27	44.4	53.19	61.97	98	52.2	41.4	57	56.6
15.	SO_4^{2-}	(mg/L)	21.5	42.5	32.5	46.5	29.5	68.0	32.5	38.5	34.5	32.5
16.	PO_4^{3-}	(mg/L)	0.38	0.49	0.45	0.39	0.48	0.51	0.46	0.52	0.56	0.53
17.	NO_3^{-}	(mg/L)	8.45	12.45	10.95	16.5	10.0	14.5	12.5	13.25	12.75	10.45
18.	Na^{+}	(mg/L)	97	324	394	424	44	236	86	84	298	206
19.	K^{+}	(mg/L)	2.6	4.2	5.9	4.5	4.6	3.6	3.7	4.9	1.5	4.5

4/11/23
Report Prepared By

4.11.23
Authrorised Signatory

4/11/23
Regional Officer

Regional Office UP Pollution Control Board, Prayagraj

Analysis Report

Sample Collected By	NGT Team (UPPCB+CPCB)
Sampling Date	17&18 Oct 2023

			Sampling Points										
			IFD-01	IFGA	IFBG	IFTG	IFDG	IFAA	IFBA	IFTA	IFDA	RBIF	RAIF
S. No	Parameters												
1.	pH	---	7.03	7.52	8.27	7.54	7.83					8.18	8.25
2.	Color	Hazen	50	25	25	50	45					20	20
3.	BOD	(mg/L)	30	40	20	34	80					10	5
4.	COD	(mg/L)	48	60	24	80	112					16	8
5.	TSS	(mg/L)	9	32	31	37	692					28	24
6.	TDS	(mg/L)	614.8	730	616	440.8	435					226.2	220.2
7.	TKN	(mg/L)	36.54					20.28	18.36	18.48	19.24		
8.	Ammonical Nitrogen	(mg/L)	24.36					28.36	24.28	20.46	22.36	0.93	0.85
9.	SO_4^{2-}	(mg/L)	40.3	38.6	31.8	34.5	38.9					10.80	11.26
10.	PO_4^{3-}	(mg/L)	4.8	5.9	4.6	4.8	5.3					0.43	0.56
11.	NO_3^-	(mg/L)	1.62	1.83	1.52	2.96	2.86					0.78	0.81
12.	Free Ammonia	(mg/L)	BDL	BDL	BDL	BDL	BDL						

4/11/23
Report Prepared By

4.11.23
Authrorised Signatory

4/11/23
Regional Officer

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244275/CENTRAL/2023

Date:09/11/2023

1- **Sample Location:** IFFCO (GW1)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	0.0833	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.1911	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.175	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.0737	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

Authorized by
VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 16:33:34 +05'30'
Vinay Dubey (ASO)

RAM GOPAL Digitally signed by RAM GOPAL Date: 2023.11.09 16:33:47 +05'30'
Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244495/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (GW2)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	0.0833	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.2715	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0481	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.0523	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

Authorized by
VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 16:35:51 +05'30'
Vinay Dubey (ASO)

RAM GOPAL Digitally signed by RAM GOPAL Date: 2023.11.09 16:36:06 +05'30'
Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244508/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (GW3)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.4485	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0124	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.3171	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

Authorized by

VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 16:39:28 +05'30'

Vinay Dubey (ASO)

RAM GOPAL Digitally signed by RAM GOPAL Date: 2023.11.09 16:39:42 +05'30'

Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244521/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (GW4)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.2233	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.3702	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.0523	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 16:42:02 +05'30'
Vinay Dubey (ASO)

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Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244544/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (GW 5)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	2.33845	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.4450	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.3243	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 16:44:38 +05'30'
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Central Laboratory

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Certificate No TC-1101S

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244559/CENTRAL/2023

Date:09/11/2023

1- **Sample Location:** IFFCO (GW6)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	0.0139	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.8506	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.5361	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.2742	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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Central Laboratory

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Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244573/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (GW7)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** R K Singh , RO

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.4002	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.1067	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.1167	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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Central Laboratory

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TEST REPORT: WATER LABORATORY(GROUND WATER)

Date:09/11/2023

Ref No: 23244589/CENTRAL/2023

1- **Sample Location:** IFFCO (GW8)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	1.2366	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.2694	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.2670	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

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Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23244599/CENTRAL/2023

Date:09/11/2023

1- **Sample Location:** IFFCO (GW9)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	2.4269	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0612	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.2241	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Dr Mamta Pandey(SA)]

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Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23245136/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFCO (IFGW)

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	14.5712	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0416	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.2312	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

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Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23245226/CENTRAL/2023

Date:09/11/2023

1- **Sample Location:** 9C8

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.4967	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.1685	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.1095	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

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Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23245204/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IPW

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	0.0139	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.0785	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0579	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.0523	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

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Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23245195/CENTRAL/2023

Date:09/11/2023

1- **Sample Location:** IPX

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	1.2366	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.0644	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.1525	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

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Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Date:09/11/2023

Ref No: 23245209/CENTRAL/2023

1- **Sample Location:** IPY

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican,

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	ND	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	0.6254	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	ND	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.0666	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

Authorized by
VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 15:52:18 +05'30'
Vinay Dubey (ASO)

RAM GOPAL Digitally signed by RAM GOPAL Date: 2023.11.09 15:52:32 +05'30'
Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-11015

TEST REPORT: WATER LABORATORY(GROUND WATER)

Ref No: 23245217/CENTRAL/2023 **Date:09/11/2023**

1- **Sample Location:** IFFVHM

2- **Address:** IFFCO Phulpur, P.O. Ghiyanagar, Phulpur, District-Prayagraj

3- **Distirct:** Prayagraj

4- **Sample Source:** Other

5- **Type of sample :** Ground Water

6- **Sample Collected By :** Ramsahai Gautam+ CPCB

7- **Odour :** None

8- **Quantity and Packing :** 1 Ltr Jerrican

9- **Date of Sample Collection :** 18/10/2023

10- **Analyis Indented by :** RO Allahabad

11- **Date of sample receipt in Lab :** 19/10/2023

Parameter	Unit	Standards Source: IS 10500:2012(2nd Rev.) Required Acceptable Limit	Results	Detection Range
Total Chromium (T.Cr), 3111 B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.05-1000 mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.05	ND	0.01-1000 mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.003	ND	0.01-1000 mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.01	0.0139	0.09-1000 mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.30	4.6306	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.02	ND	0.04-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	5	0.6825	0.01-1000mg/l
Manganese Mn, 3111-B Atomic Absorption Spectrometry	mg/l	0.1	0.3529	0.05-10 mg/l
Arsenic 3114-Hydride Generation AAS Method	mg/l	0.01	ND	-

These standards are subject to revision

Remark:* - NA

Analysed by
[Jyoti Tiwari (SA)]

Authorized by

VINAY DUBEY Digitally signed by VINAY DUBEY Date: 2023.11.09 15:49:46 +05'30'

Vinay Dubey (ASO)

RAM GOPAL Digitally signed by RAM GOPAL Date: 2023.11.09 15:50:00 +05'30'

Chief Environmental Officer
Central Laboratory

CENTRAL LABORATORY
UTTAR PRADESH POLLUTION CONTROL BOARD

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Certificate No TC-110L5

TEST REPORT: WASTE WATER LABORATORY

Ref No: 23243966/Allahabad/2023 **Date:14/11/2023**

1- **Name of Industry:** IFFCO Phulpur Unit

2- **Address of Industry:** P.O. Ghiyanagar, Prayagraj

3- **District:** Prayagraj

4- **Description about sampling point:** IFHM

5- **Type of Sample (Grab/Composite/Integrated):** Grab

6- **Sample Collected By:** Ram Sahay Gautam LA & CPCB Representative

7- **Colour and Odour:** -- ---

8- **Quantity and Packing:** 1 Ltr Jerican

9- **Date of Sample Collection:** 18/10/2023

10- **Analyis Indented by:** RO Allahabad

11- **Date of sample receipt in Lab:** 19/10/2023

Parameter/Method Name	Unit	Results	Standard	Detection Range
Total Chromium (T.Cr) , 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.1343	-	0.1-1000mg/l
Copper (Cu), 3111- B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	ND	-	0.01-1000mg/l
Cadmium (Cd), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	ND	-	0.01-1000mg/l
Lead (Pb), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	ND	-	0.02-1000mg/l
Iron (Fe), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.1999	-	0.05-1000 mg/l
Nickel (Ni), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	ND	-	0.02-1000 mg/l
Zinc (Zn), 3111-B Atomic Absorption Spectrometry (Direct Air-Ac Flame Method)	mg/l	0.0006	-	0.01-1000mg/l

Reference- (1)General Standards for discharge of envieronment Pollutants are as pert-A Effluent(Schedule-VI).The eniveronment (Protection) Rules,1986 source: www.cpcb.nic.in/GeneralStandards.pdf. Besides these standards,refer EPA standards for specific purpose

Remark: NA

Analysed by-
[Dr Mamta Pandey(SA), Jyoti Tiwari (SA)]

Authorized by
SAMRENDRA SINGH
Digitally signed by SAMRENDRA SINGH
Date: 2023.11.14 13:37:07 +05'30'
Samrendra Singh (ASO)

RAM GOPAL
Digitally signed by RAM GOPAL
Date: 2023.11.14 13:37:22 +05'30'
Chief Environmental Officer
Central Laboratory

CPCB

Central Pollution Control Board केंद्रीय प्रदूषण नियंत्रण बोर्ड
Parivesh Bhawan, East Arjun Nagar, Delhi-110 032
परिवेश भवन, ईस्ट अर्जुन नगर, दिल्ली-110 032
Water Laboratory (Wastewater Section) जल प्रयोगशाला (अपशिष्ट जल अनुभाग)
Analysis Report विश्लेषण आख्या

Source of sample: Drain/STP/ETP/Other स्रोत :ड्रेन/एस टी पी/ई टी पी/अन्य : **Waste Water**
Samples collected by नमूने एकत्रित करने वाले का नाम : **Smt. Reena Satavan & Team.** श्रीमती रीना सतावन एव टीम
Date & time of sample Collection नमूने एकत्रीकरण की तिथि एवं समय : **17/10/2023**
Date & time of sample receipt नमूने प्राप्ति की तिथि एवं समय : **19/10/2023.**
Period of sample analysis नमूने के विश्लेषण की अवधि : **19th Oct to 09th Nov 23.**
Sample registration no. & date नमूने की पंजीकरण सं. एवं तिथि : **186/Water/WW-08/2023.**
Test method reference परीक्षण विधि का संदर्भ : **APHA/BIS.** एपीएचए/बीआईएस
Report sent to (Name & Division) आख्या जारी की गयी (नाम एवं प्रभाग) : **WQM-II**

Report No.: आख्या सं : **WWL/OCT/186/2023**
Issue Date : जारी करने की तिथि : **10/11/2023**
LIMS : **WATER/WW/2324/SR00098**

S. No	Sample Code	Sample No.	Cyanide
1.	I P A	1937	0.031
2.	I P C	1938	0.033
3.	I P D	1939	0.021
4.	I P E	1940	0.034
5.	I P F	1941	0.009
6.	I P I	1942	0.014
7.	I P J	1943	0.008
8.	I P V	1944	0.012

Primary Clarifier feed (ETP RO plant)
RO permeate
RO reject
Guard pond no-2 - outlet
Storm water drain (RO plant)
feed to ammonia stripper
outlet of ammonia stripper
Effluent used in irrigation

Note: All the concentrations are expressed in mg/l except pH **नोट :** पीएच के अतिरिक्त सभी सांद्रता मिग्रा/ली. में व्यक्त की गई हैं ।

Statement:
कथन:

1. The results relate only to the samples tested. परिणाम केवल जांचे गए नमूनों से संबंधित है।
2. The report shall not be reproduced except in full without approval of the laboratory पूर्ण रिपोर्ट के अतिरिक्त प्रयोगशाला के अनुमोदन के बिना आख्या की प्रतिकृति नहीं की जायेगी।
3. BDL & Test methods are mentioned on back side of this report. बी डी एल एवं परीक्षण विधि आख्या के अंत में दिए गए हैं।
4. Samples will be retained only for one week after receipt of Report. संबंधित आख्या जारी होने के बाद नमूने केवल एक सप्ताह तक ही सुरक्षित रखे जाएंगे।

(Vinod Kumar विनोद कुमार)
Analyst विश्लेषक

for (S.M.Bilal एस एम बिलाल)
Supervisor & Reviewer पर्येवक्षक एव पुनर्वलोकक

10.11.23
(Dr.K. Ranganathan डॉ के रंगनाथन)
D.H. Water Lab प्रमुख जल प्रयोगशाला

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Stack Emission Test Report

Ref No.23398208/Allahabad/2023 **Date: 03/11/2023**

1- **Name & Address of Industry:** IFFCO Phulpur Unit
2- **Sample Collected By:** UPPCB Prayagraj
3- **Date of Monitoring:** 17/10/2023
4- **Source of Sampling:** Prill Tower No 1
5- **Stack attached to:** Pritll Tower
6- **Stack Height:** 96 meter
7- **Total No. of Boiler:** 1
8- **Capacity of Boiler:** ---
9- **Fuel used:** --
10- **Quantity of Fuel used:** ----
11- **Flue Gas Velocity:** 4.019
12- **Air Pollution Control Device:** Stack
13- **Other remarks (if any):** Stack Emission
14- **Further details of sample location nad Test methods followed are appened overleaf:**

Sr no.	Parameter	Unit	Result	Standards
1	Particulate Matter (Urea dust)	mg/Nm3	34	------

Analysed by-
[Dr Anup Kumar Gupta JRF]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad — Digitally signed by Ramjas Prasad Date: 2023.11.04 12:02:17 +05'30'

Ramesh Kumar Singh — Digitally signed by Ramesh Kumar Singh Date: 2023.11.04 12:02:06 +05'30'

Regional Officer

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Stack Emission Test Report

Ref No.23398188/Allahabad/2023

Date: 04/11/2023

1- **Name & Address of Industry:** IFFCO Phulpur Unit
2- **Sample Collected By:** UPPCB Prayagraj
3- **Date of Monitoring:** 17/10/2023
4- **Source of Sampling:** Prill Tower No 2
5- **Stack attached to:** Pritll Tower
6- **Stack Height:** 104m
7- **Total No. of Boiler:** 1
8- **Capacity of Boiler:** -----
9- **Fuel used:** ----
10- **Quantity of Fuel used:** ---
11- **Flue Gas Velocity:** 3.517
12- **Air Pollution Control Device:** Stack
13- **Other remarks (if any):** Stack Emission
14- **Further details of sample location nad Test methods followed are appened overleaf:**

Sr no.	Parameter	Unit	Result	Standards
1	Particulate Matter (Urea dust)	mg/Nm3	36	----

Analysed by-
[Dr Anup Kumar Gupta JRF]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad Digitally signed by Ramjas Prasad Date: 2023.11.04 12:04:30 +05'30'

Ramesh Kumar Singh Digitally signed by Ramesh Kumar Singh Date: 2023.11.04 12:04:19 +05'30'

Regional Officer

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Stack Emission Test Report

Ref No.23398117/Allahabad/2023

Date: 04/11/2023

1- **Name & Address of Industry:** IFFCO Phulpur Unit
2- **Sample Collected By:** UPPCB Prayagraj
3- **Date of Monitoring:** 17/10/2023
4- **Source of Sampling:** Ammonia Plant
5- **Stack attached to:** Primary Reformer Ammonia Unit 2
6- **Stack Height:** 30m
7- **Total No. of Boiler:** ----
8- **Capacity of Boiler:** -----
9- **Fuel used:** ---
10- **Quantity of Fuel used:** ----
11- **Flue Gas Velocity:** ---
12- **Air Pollution Control Device:** Stack
13- **Other remarks (if any):** Stack Emission
14- **Further details of sample location nad Test methods followed are appened overleaf:**

Sr no.	Parameter	Unit	Result	Standards
1	Nox (Monitored by Flue Gas Analyser make Testo)	ppm	70	----

Analysed by-
[Dr Anup Kumar Gupta JRF]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad Digitally signed by Ramjas Prasad Date: 2023.11.04 11:47:28 +05'30'

Ramesh Kumar Singh Digitally signed by Ramesh Kumar Singh Date: 2023.11.04 11:47:16 +05'30'

Regional Officer

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Stack Emission Test Report

Ref No.23398165/Allahabad/2023 **Date: 04/11/2023**

1- Name & Address of Industry: IFFCO Phulpur Unit
2- Sample Collected By: UPPCB Prayagraj
3- Date of Monitoring: 17/10/2023
4- Source of Sampling: Ammonia Plant
5- Stack attached to: Primary Reformer Ammonia Unit 1
6- Stack Height: 33 m
7- Total No. of Boiler: ----
8- Capacity of Boiler: ----
9- Fuel used: ----
10- Quantity of Fuel used: ----
11- Flue Gas Velocity: ----
12- Air Pollution Control Device: Stack
13- Other remarks (if any): Stack Emission
14- Further details of sample location nad Test methods followed are appened overleaf:

Sr no.	Parameter	Unit	Result	Standards
1	Nox (Monitored by Flue Gas Analyser make Testo)	ppm	90	----

Analysed by-
[Dr Anup Kumar Gupta JRF]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad Digitally signed by Ramjas Prasad Date: 2023.11.04 11:48:45 +05'30'

Ramesh Kumar Singh Digitally signed by Ramesh Kumar Singh Date: 2023.11.04 11:48:33 +05'30'

Regional Officer

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Ambient Air Test Report

Ref no-23398134/Allahabad/2023

Date: 04/11/2023

1- Name of Place and Address: IFFCO Phulpur Unit ,Prayagraj

2- Sample Collected By: Ramjas Prasad,SA

3- Date of sample Collection: 17/10/2023

4- Date of sample Receipt in Laboratory: 02/11/2023

5- Further details of sample location nad Test methods followed are appened overleaf:

Sr no.	Monitoring Location	Area Categoory	Shift	Sulphar di-oxide(ug/m3)	Nitrogen di-oxide(ug/m3)	Particulate Matter PM10(Less than 10Micron)(ug/m3)	Particulate Matter PM2.5(Less than 2.5 Micron)(ug/m3)
1	IFFCO Phulpur Unit, Prayagraj (Cordet)	Industrial/Residential/Rural/OtherArea	I	11 (24 hourly)	21 (24 Hourly)	55 (24 Hourly)	34 (24 Hourly)

Analysed by-
[Dr Anup Kumar Gupta]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad Digitally signed by Ramjas Prasad Date: 2023.11.04 12:06:31 +05'30'

Ramesh Kumar Singh Digitally signed by Ramesh Kumar Singh Date: 2023.11.04 12:06:21 +05'30'

Regional Officer

REGIONAL LABORATORY PRAYAGRAJ
UTTAR PRADESH POLLUTION CONTROL BOARD

Sector-10, Yojna No.-3 Avas Vikas Parishad Colony, Jhusi, Prayagraj

Ambient Air Test Report

Ref no-23398081/Allahabad/2023

Date: 04/11/2023

1- Name of Place and Address: IFFCO Phulpur Unit ,Prayagraj

2- Sample Collected By: Ramjas Prasad,SA

3- Date of sample Collection: 17/10/2023

4- Date of sample Receipt in Laboratory: 02/11/2023

5- Further details of sample location nad Test methods followed are appened overleaf:

Sr no.	Monitoring Location	Area Categoory	Shift	Sulphar di-oxide(ug/m3)	Nitrogen di-oxide(ug/m3)	Particulate Matter PM10(Less than 10Micron)(ug/m3)	Particulate Matter PM2.5(Less than 2.5 Micron)(ug/m3)
1	IFFCO Phulpur Unit, Prayagraj, Gate No 4	Industrial/Residential/Rural/OtherArea	I	15 (24 Hourly)	28 (24 Hourly)	59 (24 Hourly)	32 (24 Hourly)

Analysed by-
[Dr Anup Kumar Gupta]

Authorised Signatory-

Ramjas Prasad (SA)

Ramjas Prasad
Digitally signed by Ramjas Prasad
Date: 2023.11.04 12:09:06 +05'30'

Ramesh Kumar Singh
Digitally signed by Ramesh Kumar Singh
Date: 2023.11.04 12:08:56 +05'30'

Regional Officer

Annexure - XI

APPENDIX - A

FORM - I

(See rule - 7)

NOTICE OF INTENTION TO HAVE SAMPLE ANALYSED

To,

Director, IFFCO, Phulpur
Ghiyanagar, Prayagraj
212404, U.P.

Take this notice that it is intended to have analysed the same of.....

IFFCO, Phulpur, Prayagraj

which has been taken today, the 17th and 18th day of October 2023 from

IFFCO, Phulpur

(Name and designation of the person who takes the sample)

→ ETP - Inlet and Outlet
- Guard Tank - Inlet and Outlet
- Guard Tank - High Ammoniacal effluent
- Ammonia Strippers - Inlet and Outlet
- Softening Plant - Inlet and Outlet
- Cooling Tower Make up water (Ammonia-II)
- CPU - Inlet and Outlet

- STP - Inlet, Outlet and Recycling Point
- Ground water from Piezzometric well (1), Bore well (2)
- Township (IFFCO) Drain
- Storm water Drain.
- Ash Pond

*Specify the place where the sample is taken

* Duplicate sample given to the unit.

(SEAL)

SANJAY VAISH
Jt. General Manager (Technical)
INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
PHULPUR UNIT, P.O. GHIYANAGAR,
DIST. ALLAHABAD 212404, U.P. (INDIA)

DATE :

18/10/23
Reena Satavan
Sc-E, A.D; WQM-II
CPCB

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name –
Village –
Father's Name –
Age –
Gender –
Contact Information -
Location of Farm (Specify the village and proximity to IFFCO) -

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
    - Under 18
    - 18-24
    - 25-34
    - 35-44
    - 45-54
    - 55-64
    - 65 or older
3. What is the gender of your family member?
    - Male
    - Female
    - Prefer not to say
4. What is level of education in your Family?
    - Less than primary school
    - Primary school completed
    - Secondary school completed
    - Higher secondary school completed
    - Diploma or certificate course completed
    - Bachelor's degree completed
    - Master's degree or higher completed
5. How long have you been living in this village?
    - Less than 6 months
    - 6 months to 1 year
    - 1 to 3 years
    - 3 to 5 years
    - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	**Frequency**
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

Annexure - XIII

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Mrs Sunita
Village – Pali
Father's Name – Mr Ramkhelawan
Age – 52
Gender – F
Contact Information - 9670375487
Location of Farm (Specify the village and proximity to IFFCO) - 900m

Section 1: General Information

1. How many individuals are in your family?

   10

2. What age group does your family member belong to?
   - ✓ Under 18
   - o 18-24
   - ✓ 25-34
   - ✓ 35-44
   - ✓ 45-54
   - o 55-64
   - o 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - o Prefer not to say
4. What is level of education in your Family?
   - o Less than primary school
   - o Primary school completed
   - ✓ Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - o Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied).

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

सुनीता देवी

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

DR. Ramendra Singh
9452012180

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No

32. If yes, please specify the approximate number of deaths: _____

17/10/2022

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Health Dept

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Ramlakhan Patel
Village – Jagrupur
Father's Name – Late Ramkrishna
Age – 52
Gender – M
Contact Information - 9620729077
Location of Farm (Specify the village and proximity to IFFCO) - 2Km

Section 1: General Information

1. How many individuals are in your family?

   8

2. What age group does your family member belong to?
   - ✓ Under 18
   - ✓ 18-24
   - o 25-34
   - ✓ 35-44
   - o 45-54
   - o 55-64
   - o 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - o Prefer not to say
4. What is level of education in your Family?
   - o Less than primary school
   - o Primary school completed
   - o Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - ✓ Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- ✓ Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- o Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

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9452014280

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No

32. If yes, please specify the approximate number of deaths: _____

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Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Ruspata Yadav
Village – Fazilapur
Father's Name – late Ramgadh
Age – 55
Gender – M
Contact Information - 9140730559
Location of Farm (Specify the village and proximity to IFFCO) - 200 m

Section 1: General Information

1. How many individuals are in your family?

   15

2. What age group does your family member belong to?
   - ✓ Under 18
   - ✓ 18-24
   - ✓ 25-34
   - ✓ 35-44
   - ✓ 45-54
   - o 55-64
   - o 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - o Prefer not to say
4. What is level of education in your Family?
   - o Less than primary school
   - o Primary school completed
   - o Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - ✓ Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify) Services

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Poonam yadav

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

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9452014280

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

(5) Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Sukhani
Village – Sagati abdul malik
Father's Name – Late balur Ram Maurya
Age – 70
Gender – Female
Contact Information - 9450497158
Location of Farm (Specify the village and proximity to IFFCO) - 200 meter

Section 1: General Information

1. How many individuals are in your family?

   8

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- ✓ Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- o Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

Complaining of Eosinophilia (Lab Report) Not Produced

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	4
Visiting a hospital or clinic for a treatment or surgery	4
Visiting a pharmacy or drug store for a medicine or prescription	4
Visiting a traditional healer or practitioner for a remedy or cure	4

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

DR. Ravendra Singh
9412014280

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Shri Ramchandra
Village – Beer Kazi
Father's Name – Late Shri Sitaram
Age – 60 y
Gender – M
Contact Information - 9554979044
Location of Farm (Specify the village and proximity to IFFCO) -

Section 1: General Information

1. How many individuals are in your family?
   25
2. What age group does your family member belong to?
   - ✓ Under 18
   - ✓ 18-24
   - ✓ 25-34
   - ✓ 35-44
   - ✓ 45-54
   - ✓ 55-64
   - o 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - o Prefer not to say
4. What is level of education in your Family?
   - o Less than primary school
   - o Primary school completed
   - o Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - ✓ Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- ✓ Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- o Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

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9452094280

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

(7) Health Dept

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Mohd. Idrish.
Village – Beerkazi
Father's Name –
Age – 72.
Gender – M.
Contact Information - 9129317475
Location of Farm (Specify the village and proximity to IFFCO) - 1 km

Section 1: General Information

1. How many individuals are in your family?

   20

2. What age group does your family member belong to?
   - ✓ Under 18
   - o 18-24
   - ✓ 25-34
   - ✓ 35-44
   - o 45-54
   - o 55-64
   - o 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - o Prefer not to say
4. What is level of education in your Family?
   - o Less than primary school
   - o Primary school completed
   - o Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - ✓ Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify) Labour.

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	4
Skin problems (e.g., rash, dermatitis)	4
Eye problems (e.g., irritation, infection)	4
Digestive problems (e.g., diarrhea, dysentery)	4
Allergic reactions (e.g., sneezing, itching)	4
Infectious diseases (e.g., malaria, typhoid)	4
Chronic diseases (e.g., cancer, diabetes)	4

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	4
Depression or sadness	4
Anger or frustration	4
Stress or trauma	4

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

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15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No

32. If yes, please specify the approximate number of deaths: _____

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Jadish Yadav
Village – Ajhera.
Father's Name – Beizlal Yadav
Age – 38
Gender – Male.
Contact Information - 7307600392
Location of Farm (Specify the village and proximity to IFFCO) - Airport. 5 km.

Section 1: General Information

1. How many individuals are in your family? 5 member.

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44 ✓
   - 45-54 ✓
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male ✓
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed ✓
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years ✓
6. What is your main occupation? Cultivation

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 2 Cow 20 Buffalow

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No

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Phulpur
9415300462
Dr. A.K. Singh

 Veterinary 17/10/23

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Rajpati Yadav
Village – Fazilapur
Father's Name – Late Ram Gulab
Age – 55 year
Gender – Male
Contact Information - 9140730559
Location of Farm (Specify the village and proximity to IFFCO) - 200m.

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 07
Cattle & Buffalo

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): ____________

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No.

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9415380462

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Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Manju
Village – Sazai Abdul Malik (Malik)
Father's Name – W/o Vikas Chand Maurya.
Age – 45 year
Gender – Female
Contact Information - 9450497118
Location of Farm (Specify the village and proximity to IFFCO) - App. 1.5 Km

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 02
Cow

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: NO

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: NO.

17-10-23

Dr A.K. Sah

9415300462

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Manikchand
Village – Sarai Abdul Malik (Malik)
Father's Name – Raghunath Prasad Maurya
Age – 64 year
Gender – Male
Contact Information - 9794987367~~6~~
Location of Farm (Specify the village and proximity to IFFCO) - 1.5 km

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 03 Buffalo

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): __________

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No

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Dr A.K. Singh
9415300462

Ramji
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Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Rahul Kumar Yadav
Village – Veer Kayil
Father's Name – Shreepal yadav
Age – 31 year
Gender – Male
Contact Information - 8757748055
Location of Farm (Specify the village and proximity to IFFCO) - App. 1 km from IFFCO

Section 1: General Information

1. How many individuals are in your family?
   8
2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- o Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- o Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 15
Cattle & Buffalo

27. Have you observed any health issues or incidents among your livestock?

- Yes ✓
- No

28. If yes, please describe the issues or incidents: Lumpy Skin disease in cattle

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): __________

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: ____NO____

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Dy CVO Phulpur 17-10-23 9415300462

Dy CVO Phulpur Dr A.K. Singh

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Sant Lal
Village – Veer Kaji
Father's Name – Lal Ahmd Lal
Age – 55 year
Gender – Male
Contact Information - 9670863199
Location of Farm (Specify the village and proximity to IFFCO) - App. 1 Km from IFFCO

Section 1: General Information

1. How many individuals are in your family?

   20

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 25
Buffalo & Cattle

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): No treatment

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No

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9415350462
Dr A. K. Singh

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Rajendra Singh.
Village – Pali
Father's Name – Late Bajrang Bihadur Singh
Age – 72 year
Gender – Male
Contact Information - 8800216914
Location of Farm (Specify the village and proximity to IFFCO) - App. 1 Km.

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 10
Cattle & Buffalo

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: 16

17-10-23
9415380462
Dr A. K. Singh

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – ~~Anita Devi~~ Dharmraj.
Village – Mansi Khurd
Father's Name – Chandeep Bhartiya
Age – 35 year
Gender – male
Contact Information - 9598865039
Location of Farm (Specify the village and proximity to IFFCO) - 1 km

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-~~44~~
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 03
Buffalo & Cattle

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No

17-10-23
9415300469
Dr A. K. Singh

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Ram Lakhan Patel
Village – Jafarpur Orf Baraganj
Father's Name – Late Ram Kishan
Age – 55 year
Gender – Male
Contact Information - 9670728077
Location of Farm (Specify the village and proximity to IFFCO) - 2.5Km

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: 03 Buffalo & Cattle

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: No

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: No

17/10/23

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Dr A.K. Singh
17-10-23

18/10/2022

Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Mrs Ashiya Beagum
Village – Khodaypur
H/o ~~Father's~~ Name – Sageer Ahemed.
Age – 65.
Gender – Female.
Contact Information -
Location of Farm (Specify the village and proximity to IFFCO) -

Section 1: General Information

1. How many individuals are in your family?

   (13)

2. What age group does your family member belong to?
   - Under 18 07
   - 18-24 — 02
   - 25-34
   - 35-44 03
   - 45-54
   - 55-64
   - 65 or older 01
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- o Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- ✓ Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	৭
Skin problems (e.g., rash, dermatitis)	৩
Eye problems (e.g., irritation, infection)	৩
Digestive problems (e.g., diarrhea, dysentery)	৩
Allergic reactions (e.g., sneezing, itching)	৩
Infectious diseases (e.g., malaria, typhoid)	৩
Chronic diseases (e.g., cancer, diabetes)	৩

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	৩
Depression or sadness	৩
Anger or frustration	৩
Stress or trauma	৩

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	৩
Visiting a hospital or clinic for a treatment or surgery	৩
Visiting a pharmacy or drug store for a medicine or prescription	৩
Visiting a traditional healer or practitioner for a remedy or cure	৩

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	০৫
Affordability or cost of health services	০৫
Quality or effectiveness of health services	০৫
Safety or hygiene of health services	০৫

Reliable Surv. by: Yasmeen Bano

Section 4: Impact on Land and Crops

Visited for Survey 8302028293

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No

32. If yes, please specify the approximate number of deaths: _____

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Paras Nath.
Village – Khudaypur
Father's Name – Gajadhar
Age – 70
Gender – M
Contact Information - 9598835922
Location of Farm (Specify the village and proximity to IFFCO) - Approx 7 km.

Section 1: General Information

1. How many individuals are in your family?

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g.. asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: _____

Cow - 3, Buffalo - 9, and Goat - 12.

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: _____

Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: _____

18-10-23
Dy CVO
Phulbani
9415300462
Dr. A. K. Singh

 Health Deptt. 1

17/10/2023

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Shri Santosh Kumar Jaiswal
Village – Manglik Ka Pura
Father's Name – Mr. Mevalal.
Age – 52
Gender – M
Contact Information - 9792093958
Location of Farm (Specify the village and proximity to IFFCO) - 1 Km

Section 1: General Information

1. How many individuals are in your family?

   5

2. What age group does your family member belong to?
   - Under 18
   - ✓ 18-24
   - ✓ 25-34
   - 35-44
   - ✓ 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - ✓ Male
   - ✓ Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - ✓ Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	1
Skin problems (e.g., rash, dermatitis)	1
Eye problems (e.g., irritation, infection)	1
Digestive problems (e.g., diarrhea, dysentery)	1
Allergic reactions (e.g., sneezing, itching)	1
Infectious diseases (e.g., malaria, typhoid)	1
Chronic diseases (e.g., cancer, diabetes)	1

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	1
Depression or sadness	1
Anger or frustration	1
Stress or trauma	1

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

विनीता देवी

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	1
Visiting a hospital or clinic for a treatment or surgery	1
Visiting a pharmacy or drug store for a medicine or prescription	1
Visiting a traditional healer or practitioner for a remedy or cure	1

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	5
Affordability or cost of health services	5
Quality or effectiveness of health services	5
Safety or hygiene of health services	5

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

DR. Ravendra Singh
9410142180

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No

32. If yes, please specify the approximate number of deaths: _____

18/08/23

Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Mr Suryabhan
Village – Mamelthue (Sondalpur)
Father's Name – Lt. Shri Nandlal.
Age – 42 yrs.
Gender – Male.
Contact Information - 8948641108
Location of Farm (Specify the village and proximity to IFFCO) -

Section 1: General Information

1. How many individuals are in your family?

   08.

2. What age group does your family member belong to?
   - ✓ Under 18
   - o 18-24
   - o 25-34
   - o 35-44
   - ✓ 45-54
   - o 55-64
   - o 65 or older
3. What is the gender of your family member?
   - o Male
   - o Female
   - o Prefer not to say
4. What is level of education in your Family?
   - ✓ Less than primary school
   - o Primary school completed
   - o Secondary school completed
   - o Higher secondary school completed
   - o Diploma or certificate course completed
   - o Bachelor's degree completed
   - o Master's degree or higher completed
5. How long have you been living in this village?
   - o Less than 6 months
   - o 6 months to 1 year
   - o 1 to 3 years
   - o 3 to 5 years
   - ✓ More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	০৭
Skin problems (e.g., rash, dermatitis)	০৭
Eye problems (e.g., irritation, infection)	০৭
Digestive problems (e.g., diarrhea, dysentery)	০৭
Allergic reactions (e.g., sneezing, itching)	০৭
Infectious diseases (e.g., malaria, typhoid)	০৭
Chronic diseases (e.g., cancer, diabetes)	০৭

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	০৭
Depression or sadness	০৭
Anger or frustration	০৭
Stress or trauma	০৭

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	01
Visiting a hospital or clinic for a treatment or surgery	01
Visiting a pharmacy or drug store for a medicine or prescription	01
Visiting a traditional healer or practitioner for a remedy or cure	01

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	05
Affordability or cost of health services	05
Quality or effectiveness of health services	05
Safety or hygiene of health services	05

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

18/8/2023

Health

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Mr Rakesh kumar Jadava S/o Jaydish.
Village – Ajehera.
Father's Name – Shri Brijlal Jadava
Age – 38 yrs
Gender – male.
Contact Information -
Location of Farm (Specify the village and proximity to IFFCO) -

Section 1: General Information

1. How many individuals are in your family?

   05

2. What age group does your family member belong to?
   - Under 18 01
   - 18-24
   - 25-34
   - 35-44 – 03
   - 45-54
   - 55-64 – 01
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- ✓ Farmer or agricultural worker
- o Industrial worker or laborer
- o Shopkeeper or trader
- o Teacher or educator
- o Health worker or provider
- o Student or learner
- o Housewife or homemaker
- o Retired or pensioner
- o Unemployed or looking for work
- o Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	৩৷
Skin problems (e.g., rash, dermatitis)	৫
Eye problems (e.g., irritation, infection)	৩৷
Digestive problems (e.g., diarrhea, dysentery)	৫৷
Allergic reactions (e.g., sneezing, itching)	৫৷
Infectious diseases (e.g., malaria, typhoid)	৩৷
Chronic diseases (e.g., cancer, diabetes)	০৷

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	৩৷
Depression or sadness	০৷
Anger or frustration	৩৷
Stress or trauma	০৷

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	०१
Visiting a hospital or clinic for a treatment or surgery	०१
Visiting a pharmacy or drug store for a medicine or prescription	०१
Visiting a traditional healer or practitioner for a remedy or cure	०१

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	०५
Affordability or cost of health services	०५
Quality or effectiveness of health services	०५
Safety or hygiene of health services	०५

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes
- No

26. If yes, please specify the types of animals and approximate numbers: _____

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

    - Yes
    - No

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

    - Veterinary care
    - Changes in feed
    - Relocated livestock
    - Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

    - Yes
    - No

32. If yes, please specify the approximate number of deaths: _____

veterinary

18/10/2023.

Industrial Impact Health Survey Questionnaire for Villagers

Please answer the following questions based on your experience in the past 12 months.

Name – Surya Bhan
Village – Sandalpur (Manethua)
Father's Name – Late Nand lal.
Age – 45
Gender – M
Contact Information - 8948641108.
Location of Farm (Specify the village and proximity to IFFCO) - Adjacent — 6 Km.

Section 1: General Information

1. How many individuals are in your family? 05.

2. What age group does your family member belong to?
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or older
3. What is the gender of your family member?
   - Male
   - Female
   - Prefer not to say
4. What is level of education in your Family?
   - Less than primary school
   - Primary school completed
   - Secondary school completed
   - Higher secondary school completed
   - Diploma or certificate course completed
   - Bachelor's degree completed
   - Master's degree or higher completed
5. How long have you been living in this village?
   - Less than 6 months
   - 6 months to 1 year
   - 1 to 3 years
   - 3 to 5 years
   - More than 5 years
6. What is your main occupation?

- Farmer or agricultural worker
- Industrial worker or laborer
- Shopkeeper or trader
- Teacher or educator
- Health worker or provider
- Student or learner
- Housewife or homemaker
- Retired or pensioner
- Unemployed or looking for work
- Other (please specify)

Section 2: Environmental Impact

7. How often are you exposed to the following environmental hazards due to the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Hazard	Frequency
Air pollution (e.g., smoke, dust, odor)	
Water pollution (e.g., chemicals, waste, color)	
Soil pollution (e.g., pesticides, fertilizers, metals)	
Noise pollution (e.g., loud sounds, vibrations)	
Land degradation (e.g., erosion, deforestation, desertification)	
Loss of biodiversity (e.g., extinction, invasion, displacement)	

8. How satisfied are you with the following aspects of your environmental quality in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Availability of clean air	
Availability of clean water	
Availability of fertile soil	
Availability of natural resources	
Availability of green spaces	

9. How often do you experience the following environmental problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4=Often, and 5=Always)

Problem	Frequency
Crop failure or reduced yield	
Water scarcity or contamination	
Food insecurity or malnutrition	
Natural disasters or extreme weather	

Section 3: Health Impact

10. How often do you experience the following physical health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Respiratory problems (e.g., asthma, bronchitis)	
Skin problems (e.g., rash, dermatitis)	
Eye problems (e.g., irritation, infection)	
Digestive problems (e.g., diarrhea, dysentery)	
Allergic reactions (e.g., sneezing, itching)	
Infectious diseases (e.g., malaria, typhoid)	
Chronic diseases (e.g., cancer, diabetes)	

11. How often do you experience the following mental health problems as a result of the industrial activities in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Problem	Frequency
Anxiety or nervousness	
Depression or sadness	
Anger or frustration	
Stress or trauma	

12. How often do you use the following health services in your area? (Answer on a scale of 1 to 5, where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always)

Service	Frequency
Visiting a doctor or nurse for a check-up or consultation	
Visiting a hospital or clinic for a treatment or surgery	
Visiting a pharmacy or drug store for a medicine or prescription	
Visiting a traditional healer or practitioner for a remedy or cure	

13. How satisfied are you with the following aspects of the health services in your area? (Answer on a scale of 1 to 5, where 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very satisfied)

Aspect	Satisfaction
Accessibility or availability of health services	
Affordability or cost of health services	
Quality or effectiveness of health services	
Safety or hygiene of health services	

Section 4: Impact on Land and Crops

14. How long have you been farming in this area?

- Less than 5 years
- 5-10 years
- 10-20 years
- More than 20 years

15. What crops do you cultivate on your land? (Select all that apply)

- Wheat
- Rice
- Sugarcane
- Cotton
- Vegetables
- Others (please specify): _____

16. Have you noticed any changes in the quality of your soil in recent years?

- Yes
- No

17. If yes, please describe the changes: _____

18. Have you observed any changes in the growth or health of your crops?

- Yes
- No

19. If yes, please describe the changes and specify the affected crops: _____

20. How has the land's productivity been affected?

- Decreased
- Unchanged
- Improved

21. Are there specific areas on your land where the impact is more significant? Please describe: _____

22. Have you experienced any crop losses or reduced yields due to these changes?

- Yes
- No

23. If yes, please provide approximate percentages: _____

24. What measures, if any, have you taken to mitigate the impact on your land and crops? (Select all that apply)

- Adjusted irrigation
- Soil amendments
- Changed crop varieties
- Other (please specify): _____

Section 5: Livestock Health and Incidents

25. Do you own livestock or animals on your farm?

- Yes ✓
- No

26. If yes, please specify the types of animals and approximate numbers: _____

Cow - 2, Buffalow - 1

27. Have you observed any health issues or incidents among your livestock?

- Yes
- No ✓

28. If yes, please describe the issues or incidents: _____

29. Do you suspect that these health issues or incidents are related to any contamination of water or feed?

- Yes
- No ✓

30. Have you had to take any actions or treatments for your livestock due to these health issues? (Select all that apply)

- Veterinary care ✓
- Changes in feed
- Relocated livestock
- Other (please specify): _____

31. Have you experienced any livestock deaths due to these health issues?

- Yes
- No ✓

32. If yes, please specify the approximate number of deaths: _____

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