फूलपुर इकाई
PHULPUR UNIT

IFFCO

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

Ref.: TE/02/231 Date: 02.08.2023

To,

The Member Secretary,
U.P.Pollution Control Board,
"T.C./12 V" Vibhuti Khand,
Gomti Nagar, Lucknow – 226010

Sub: Environmental Statement of IFFCO Phulpur Unit for the Financial Year Ending 31st March 2023 under the Environment (Protection) Rules, 1986 and its amendment 1993.

Dear Sir,

In compliance of Rule 14 of the Environment (Protection) Rules 1986 and its amendment 1993, please find enclosed herewith Environmental Statement of IFFCO Phulpur Unit for the Financial Year Ending 31st March, 2023.

This is for your kind perusal and reference please.

Thanking you,

Yours faithfully,
For, Indian Farmers Fertiliser Cooperative Ltd.

(Sanjay Kudesia)
Sr. Executive Director

Encl: as above.

Copy:

01. Regional Officer,
U.P.Pollution Control Board,
Sector-10, Yojna No. – 3
Avas Vikas Colony, Jhunsi, Prayagraj-211019

02. The Section Officer
Ministry of Environment & Forests, Govt. of India
Paryavaran Bhawan B-Block
C.G.O.Complex, Lodi Road, New Delhi- 110003

03. The Regional Officer (Central Region)
Ministry of Environment & Forests,
Kendriya Bhawan, 5th Floor, Sector "H" Aliganj,
Lucknow – 226 024

04. Fertiliser Association of India
10 Shaheed Jit Singh Marg
New Delhi - 110067

05. Director (Technical)
IFFCO Head Office
New Delhi - 110017

ISO 9001 Quality Management
ISO 14001 Environmental Management
OHSAS 18001 Occupational Health and Safety Management
ISO 50001 Energy Management

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FORM - V

(See Rule 14)

Environmental Statement for the financial year ending on 31st March, 2023

PART - A

(i)	Name and Address of the owner/occupier of the Industry operation or process.		**Sanjay Kudesia** **Sr. Executive Director** IFFCO, PHULPUR UNIT, P.O.GHIYANAGAR DISTT. - PRAYAGRAJ- 212 404
(ii)	Industry Category Primary - (STC Code) Secondary - (SIC Code)		STRAIGHT NITROGENEOUS FERTILISER
(iii)	Production Capacity	UNIT - I	**2300 MT/DAY UREA**
		UNIT - II	**3490 MT/DAY UREA**
(iv)	Year of Establishment	UNIT - I	Start of Project : 26.05.1976 Commercial Production : 28.03.1981
		UNIT -II	Start of Project : 20.04.1995 Commercial Production : 22.12.1997
(v)	Date of the last Environmental Statement submitted.		12.08.2022

PART - B

Water and Raw Materials Consumption

		Unit - I & II (Average for 1st April, 2022 to 31st March 2023)
(1)	Water Consumption M3/day	34342
	Process M3/day	5307
	Cooling M3/day	25034
	Domestic M3/day	4000

Note : **(i) 7312 M3/ day (approx.) of Effluent water recycled/reused through Hydrolyser STP, ETP etc.**

(ii) Water consumption shown in 'cooling' head includes cooling towers makeup, Fire water testing and in case of emergency,used in Plant shut down purpose etc.

Name of Products	Water consumption per Unit of Product for both Unit-I & Unit-II (M3 per Te of Urea Produced)	
	During the Previous Financial Year 21-22 (Excluding Domestic Water)	During the Current Financial Year 22-23 (Excluding Domestic Water)
UREA	5.48	5.41

(ii) Raw Material Consumption — Consumption of Raw Materials per Unit of output.

Name of Raw Material	Name of Product	UNIT - I		UNIT - II	
		During the Previous Financial Year 21-22 (Apr - Mar)	During the Current Financial Year 22-23 (Apr - Mar)	During the Previous Financial Year 21-22 (Apr - Mar)	During the Current Financial Year 22-23 (Apr - Mar)
	UREA				
Coal (MT/Tone of Urea)		0.13517	0.12659	0.03348	0.01545
HSD (MT/Tone of Urea)		0.00001	0.00000	0.00000	0.00000
LNG (000, SM3/Tone of Urea)		0.69695	0.64599	0.65474	0.60450

Note: Steam generated in Coal fired Boilers of Unit - I has been exported partly to Unit - II for Urea Production.

PART - C

Pollution Discharge to Environment/Unit of output
(Parameter as specified in the consent issued)

(1)	Pollutants	Quantity of Pollutants discharged (mass/day)	Concentrations of Pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a)	Water	As Per Annexure - I		
(b)	Air	As Per Annexure - II		

PART - D
Hazardous Waste
(as specified under Hazardous and other Wastes (Management and Transboundry Movement Rules, 2016)

Hazardous Wastes		Total Quantity for Unit- I & II both (tonnes)	
		During the Previous Financial Year 21-22 (Apr - Mar)	During the Current Financial Year 22-23 (Apr - Mar)
(a)	From Process (catalyst) MT	50.92	NIL
(b)	Waste Lube Oil/Transformer Oil (KL)	52.50	20.55

Note : 1- Waste oil collected / reclaimed or disposed off to authorised parties.
2- Spent Catalyst is also sold to authorised parties.

PART - E
Solid Wastes

		Total Quantity for Unit-I & II both	
		During the Previous Financial Year 21-22 (Apr - Mar)	During the Current Financial Year 22-23 (Apr - Mar)
(a)	**Quantity generated from Process**		
	Lime Sludge (Tonne)	4088	5752
(b)	**Quantity generated from Pollution Control Facility (ESP)**		
	Coal Ash (Tonne)	43784	40246
(c)(1)	**Quantity recycled or re-utilised within the Unit (Tonne)**		
	Lime Sludge	-	-
	Coal Ash	487	551
(2)	**Given to out side parties** (Tonne)		
	Lime Sludge (Free of Cost/Sold)	49	964
	Coal Ash (Free of Cost/Sold)	62018	82619
(3)	**Disposed in settling Ponds (Tonne)**		
	Lime Sludge	4039	4788
	Coal Ash	-	-

Note During the year 2022 - 2023, about 83170 MT of ash was utilised against generation of about 40246 MT, which is >100% of total ash generation.

PART - F

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

(a) Characteristics of Hazardous and Solid Wastes

Please Refer ANNEXURE - III

(b) Quantity Generated — Average for the last three Years

	UNIT - I & II
1. Spent Catalyst	50.92 MT/Year (Avg.)
2. Lime Sludge	4817 MT/Year (Avg.)
3. Ash	42939 MT/Year (Avg.)
4. Waste Oil	41.85 KL (Avg.)

(c) Disposal Practices for solid wastes and Hazardous Wastes :

Please Refer ANNEXURE - IV

PART - G

Impact of the Pollution abatement measures taken on conservation of natural resources and on the cost of production.

Please Refer ANNEXURE - V (Water Conservation measures)

Please Refer ANNEXURE - VI (Cost Benefit Ratio)

PART - H

Additional measures/investment proposal for environmental protection including abatement of pollution/Prevention of Pollution.

Please Refer ANNEXURE - VII A & B

PART - I

Any other particulars for improving the quality of the Environment.

Please Refer ANNEXURE - VIII

ANNEXURE - I

WATER

Sl.No.	Pollutants	Quantity of Pollutants discharged (Avg.for 2022-23) All figures are in kg/day except pH	Concentration of Pollutants in discharge (Avg.for 2022-23) All figures are in mg/litre except pH	Maximum Allowable Limit mg/litre except pH	Percentage of Variation from Prescribed standards with reasons.
01.	Total Suspended Solids	70.60	45.67	100	Well with in the prescribed standards
02.	pH	-	7.20	6.5 - 8.5	--- do --
03.	BOD for 5 days at 20 deg. C	27.88	18.04	30	--- do --
04.	Oil and Grease	3.09	2.00	10	--- do --
05.	Total Residual Chlorine	N.T.	N.T.	1.0	--- do --
06.	Total Chromium as Cr	N.T.	N.T.	2.0	--- do --
07.	Hexavalent Chromium as Cr	N.T.	N.T.	0.1	--- do --
08.	Zinc as Zn	N.T.	N.T.	5.0	--- do --
09.	Ammonical Nitrogen as N	40.22	26.01	50	--- do --
10.	Free Ammonia	0.63	0.41	2	--- do --
11.	Total Kjeldahl Nitrogen as N	62.70	40.56	75	--- do --
12.	Chemical Oxygen demand	67.21	43.47	250	--- do --
13.	Chlorides as Cl	1244.00	805.00	1000	--- do --
14.	Nitrate Nitrogen as N	1.47	0.95	10	--- do --

Average daily effluent discharge M3/day (Avg. for 2022-2023)

Liquid Effluent Discharge	Liquid Effluent after adequate treatment is reutilised in Plant process. About 1546 M3/day treated effluent is utilised for irrigation of farm land, green belt, dust suppression in Coal Yard & Ash Pond with-in our premises.

ANNEXURE - II

AIR EMISSION

Sl. No.	Pollutants	Quantity of Pollutants discharged (Avg. for 2022 -2023 Tonne/day)	Concentrations of Pollutants in discharges (Avg. for 2022 -2023 (mg/NM3)	Maximum Allowable as per consent issued/ prescribed standard	Percentage of Variation from prescribed standards with reasons.
	UNIT - I				
01.	**PRILL TOWER (UREA PLANT)**				
	Urea (Particulate matter emission)	0.836	41.72	150.0 mg/NM3 (2.0 kg/Tonne of Urea)	Well within the prescribed standards
02.	**Primary Reformer- I**				
	NOx	8.04	131.06	400 mg/NM3	--- do --
3	**CHIMNEY (POWER PLANT)**				
(a)	Suspended Particulate Matter	0.210	30.72	100 mg/NM3	--- do --
(b)	Sulphur Dioxide	2.095	321.13	(600 mg/NM3 at 0 deg.C)	--- do --
	UNIT - II				
01.	**PRILL TOWER (UREA PLANT)**				
	Urea (Particulate matter emission)	1.316	42.17	50.0 mg/NM3 (0.5 kg/Tonne of Urea)	--- do --
02.	**Primary Reformer- II**				
	NOx	9.850	129.37	400 mg/NM3	--- do --
3	**CHIMNEY (POWER PLANT)**				
(a).	Suspended Particulate Matter	0.000	0.00	100 mg/NM3	--- do --
(b)	Sulphur Dioxide	0.000	0.00	-	--- do --

* Boiler no. 4 has been de-capitalised and duly informed to UPPCB and CPCB .

ANNEXURE - III

A. *PROPERTIES OF HAZARDOUS WASTES :*

01. SPENT CATALYST :

Primary Reformer	:	Main Constituent	=	Nickel
	:	Shape	=	Rings
	:	Bulk density (approx)	=	1.11 & 0.95 MT/M3
Secondary Reformer	:	Main Constituent	=	Nickel
	:	Bulk density (approx)	=	1.12 MT/M3
Methanator	:	Main Constituent	=	Nickel
	:	Shape	=	Spheres
	:	Bulk density (approx)	=	0.9 MT/M3
L.T. Shift converter	:	Main Constituent	=	Copper/Zinc
		Shape	=	Tablets
		Bulk density (approx)	=	1.28 & 1.4 MT/M3
H.T. Shift converter		Main Constituent	=	Iron/ Chromium
		Shape	=	Tablets
		Bulk density (approx)	=	1.20 MT/M3

02. WASTE OIL

Oil collected from floor washings and spillages from different Plants/Sections etc..

State	-	Liquid
Color	-	Brown to Black
Density	-	0.95 Kg/Lit

B. *PROPERTIES OF SOLID WASTES :*

	Constituent	*% by Wt.*
01. LIME SLUDGE	Calcium as (CaO)	50 - 70
	Magnesium as (MgO)	3 - 6
	Iron as (Fe 2O3)	0.15 - 0.30
	Silica as (SiO2)	1- 3
	Sulphur as (S)	6 - 9
	Loss on ignition	17 - 18
02. FLY ASH	Silica as (SiO2)	40 - 60
	Alumina as (A12O3)	20 - 24
	Iron as (Fe 2O3)	3 - 7
	Calcium as (CaO)	1.5 - 2.5
	Magnesium as (MgO)	0.5 - 1.5
	Sodium as (Na2O)	0.05-0.1
	Potassium as (K2O)	0.5-1.0
	Phosphorous as (P2O5)	0.3 - 0.5
	Loss on ignition	10 - 20

ANNEXURE – IV

Disposal Practices of Solids Wastes and Hazardous Wastes:

01. Disposal of Ash:

a. Disposal of dry ash directly from ESP:

A mechanised system to transport fly ash from the Electrostatic Precipitators to a 240 MT capacity silo by pneumatic conveying has been commissioned in April - 2000. With this system, it has been possible to load and despatch about 80% to 90% of the dry ash generation from the silo to the Cement Factories. The dry ash from the ESP is being directly dispatched to the Cement Industries.

b. Utilisation of Pond Ash for Reclamation of Usar Farmlands

The efficacy of pond ash in the treatment of alkaline soils has been clearly established. Pond ash is gainfully utilised for "Usar" farmland reclamation located within a radius of 10 - 20 Km through the auspices of Moti Lal Nehru Farmers Training Institute Phulpur.

c. Utilisation of Pond Ash by Cement Manufacturers

Cement majors, with whom we have a tie - up for lifting dry ash directly from the ESP's along with a host of other mini–Cement Plants, are excavating and transporting Pond Ash also from our Ash Ponds in trucks for the manufacture of PPC.

d. Utilisation of Fly Ash for the manufacture of clay Bricks by local Brick kilns.

IFFCO Phulpur endeavoured to create awareness among nearby brick kiln owners regarding the Fly Ash Gazette Notification and to educate them on the use of ash mixed with clay for the manufacture of clay bricks by the conventional process. IFFCO Phulpur is also promoting brick kiln owners to mix fly ash with clay.

e. Production of Fly ash bricks

Fly ash is also being used for production of fly ash brick. A fly ash brick plant has been installed. In the financial year 2022-23, about 551 MT of fly ash was used in fly ash brick plant for fly ash brick manufacturing.

02. Lime Sludge from Water Softening Plant:

In the water softening plant approx. 550 m3/day of lime sludge having about 2.5% solids is pumped to a pond to settle down the solids. This lime sludge is dried and then dispatched to interested outside parties.

03. Spent Catalyst:

Catalysts used in different reactors of Ammonia Plant are mainly Nickel, Iron, Copper and Zinc base. After a certain time of interval, these catalysts are checked and if found exhausted, replaced by fresh catalysts. The spent catalysts are stored in closed metallic drums under shed inside the factory premises for sale to outside authorized parties. The spent catalyst generated in FY 2022-23 is NIL and 16.92 MT has been sold to authorized parties in the financial year 2022-23.

04. Waste Oil:

Waste oil generated in the different sections of our Plant is collected and stored in metallic drums and disposed of to authorized parties. 20.55 KL Waste oil generated and 48.69 KL has been sold to authorized parties in the financial year 2022-23.

ANNEXURE – V

Water Conservation Measures

IFFCO is very conscious and careful of utilization of effluent water. Schemes have been adopted right since inception of the plant for careful utilization of the precious commodity. The following systems are already working at IFFCO.

01. Reuse of Steam Condensate from Urea Plant:

Steam condensate in the tune of 700 m3/day and 850 m3/day from CO2 Compressor Turbine of Urea-I & Urea-II Plants respectively are recycled to utilize in steam generation plant as a makeup to boiler feed water. Urea plant process condensate in the tune of 1550 m3/day and 1300 m3/day from Urea-I and Urea-II Plants respectively is passed through the Condensate Polisher Unit and used as the fresh DM water for supply to boilers of ammonia plants and utility steam generation plants.
This recycle of steam condensate from Urea Plant to steam generation plant saves an equal quantity of D.M. Water. This recycle system is operating since beginning.

02. Reuse of Process Condensate and Steam Condensate from Ammonia Plant:

About 1050 m3/day & 1800 m3/day process condensate is generated in Ammonia – I & Ammonia-II, respectively. The ammonical content of these condensate is stripped off in medium pressure steam distillation columns. Further it is allowed to pass through a condensate polisher unit to remove all possible impurities contained in the process condensate. This polished condensate is used as the fresh DM water for supply to boilers of ammonia plants and utility steam generation plants saving of an equal quantity of D.M. Water.

Ammonia plant have various condensing steam turbines as prime movers of various pumps, compressors and fan etc. The exhaust steam from these turbines is condensed in surface condenser. The surface condensate amounting to 3300 m3/day is passed through the Carbon Bed to remove any oil impurities and reused in steam generation of Ammonia Plant-I itself whereas in Ammonia Plant – II Turbine condensate amounting to 3000 m3/day is sent to condensate polisher where it is polished and later on pumped back to DM water tank of Ammonia-II plant for steam generation in its waste heat boilers resulting saving of equal quantity of D.M. water.

03. Reuse of Inert Gas Plant – I Effluent:

Quench water / cooling water from I.G. Plant contains negligible amount of Ammonia. Hence almost total quantity of this water is directly pumped to water softening plant during operation of IG Plant. This saves equal quantity of raw water.

04. Utilization of Treated Sewage Water:

Sewage Water, generated from our residential colony which is treated in Sewage Treatment Plant. Treated Sewage Water generated is approximately 2000 M3/day and used in process as cooling water make-up through water softening plant or in irrigation of Farm Land. This saves an equal quantity of Raw Water.

05. Reuse of Waste Water from vacuum system of Urea Plant (Deep Urea Hydrolyser):

In order to recover the valuable Urea and Ammonia from Effluent and make effluent reusable, the deep urea hydrolyser (operating at 36 Ata and 240 deg. C) has been installed and operated. Hydrolyser system hydrolyzed Urea present in waste water and recycle the products of hydrolysis i.e. Ammonia and Carbon Dioxide back to process for increased production of Urea and this water is purified for reuse as boiler feed water after passing through condensate polisher unit.

Following benefits have been achieved:

Recovery of Ammonia and carbon dioxide from waste water for reuse in the process.

Reduction of DM Water & saving of required chemical for regeneration of equivalent water by better operation and maintenance practices.

Reduction in quantity & improvement in quality of the effluent.

06. Reuse of jacket cooling water of Ammonia Plant–I as make-up water to Ammonia Cooling Tower:

About 180 M3/day of D.M. Water/surface condensate is used for jacket cooling of transfer line of secondary reformer and waste heat boilers. It is collected in a metallic tank and transferred to underground sump near Ammo. -I cooling Tower, from where it is pumped into basin of Ammonia Cooling Tower. Reuse of this water saves an equal quantity i.e. 180 M3/day of soft water and also reduces the effluent by the same quantity.

07. Reuse of Flash Tank Condensate of Power Plant –I as make up water to Ammonia Cooling Tower:

About 100 M3/day of flash tank condensate which comes out from Power Plant-I is collected into underground tank near Ammonia Cooling Tower along with jacket water from Ammonia Plant. This water is pumped into Ammonia Cooling Tower basin. This saves an equal quantity of softened water and also reduces the effluent by the same quantity.

08. Recycle of Raw Water Pump House Ejector Discharge into Water Softening Plant:

About 150 M3/day pump house ejector discharge was going into effluent channel leading to Guard Pond. This water is presently being recycled into water softening plant. This saves fresh water by an equal quantity i.e. 150 M3/day and also reduces effluent by same quantity.

09. Reuse of R.V. sealing water of Ammonia Plant-I:

About 270 M3/day R.V. sealing water of Ammonia Plant –I, is collected in a sump. This water is reused into Ammonia Cooling Tower-I. This saves an equal quantity of soft water and also reduces effluent by same quantity.

10. Reuse of off spec. Ammonical & de-oiled effluent:

About 720 M3/day (Max.) off spec. Ammonical effluent and de-oiled water from Ammonia and Urea Plant is treated into stripper of effluent treatment plant. After treatment, this treated effluent water is recycled and reused into water softening plant. This saves an equal quantity of raw water and also reduces the effluent by same quantity.

11. Recycle and Reuse of Treated Effluent:

Treated effluent from various unit of the plant mix in the Guard Pond. The quality of this final effluent is well within the standards laid down by Uttar Pradesh Pollution Control Board, Lucknow and MINAS.

This water is therefore recycled and used for the following purposes:

De-ashing operation in the Power Plant.

Irrigation of Farm Land of the CORDET (Moti Lal Nehru Farmers Training Institute).

Irrigation of Green Belt and Horticulture purpose.

Coal yard spraying in Power Plant etc.

12. Reuse of Treated Effluent Water from R.O. Plant:

We have installed and operating an effluent treatment plant (Capacity – 3600 M3/day) based on Reverse Osmosis Technology to treat the Industrial effluent. This is a unique and pioneer effluent treatment plant in Indian Fertilizer Industry to treat the Industrial Liquid Effluent e.g. regeneration effluent of D.M. Plant, cooling water blow down and surplus effluent water of Guard Pond. The treated water is recycled and reused in softening plant for process use.

ANNEXURE – VI

COST BENEFIT RATIO OF EACH SCHEMES IS AS UNDER

Sl. No.	Scheme Implemented	Year of Installation	Saving of Natural Resources M3/Day	Cost Benefit Ratio in Terms of Pay Back Period	
				Expenditure in Rs. (Lakh)	Pay Back Period (Years)
1	**Urea Plant** Urea Hydrolyser with online continuous Urea Ammonia Analyzer.	November 90	750	195.25	1.95
	Process condensate and steam condensate recycle (replaces Demineralized water which is used for steam generation.	October 90	1700	17.90	Less than a year
2	**Ammonia Plant** Process Condensate recycle to steam generation plant (replaces DM Water)	October 80	1200	73.04	2.6
03.	**Inert Gas Plant** I.G. Plant effluent is reused in deashing/water softening plant (replaces Raw Water)	Feb. 88	1200	12.0	3.03
04.	**Total Effluent Recycle System At Guard Pond Outlet System**. Effluent water is recycled and reused for deashing, Irrigation of farm land in CORDET, Coal Yard spraying. Ash pond spraying and green belt development (Replaces Raw Water)	May 90 to Feb 96	9770	140.75	4.36
05.	**Sewage Treatment Plant** Treated Sewage Water is recycled into water softening plant (Replaces Raw Water)	Aug - 97	2000	151.00	----

06.	**Carbon Dioxide Recovery Plant** A Carbon Dioxide Recovery Plant has been installed to recover the CO_2 gas from flue gases of Primary Reformer of Ammonia Plant.	Dec.- 2006	9950 M3/Hr. of CO2 has been recovered from flue gases.	6050.00	-----
07.	**Installation of GTG-HRSG**	Nov. 2016	250 Coal MTPD 3045 SM3/hr. gas	24960.00	---
08.	**Urea Plant** Replacement of CO_2 from M/s Hitachi, Japan in 41 Unit of Urea-II Plant with new efficient CO_2.	2016	11750.9 SM3/day of Gas	2592.50	3.4
09.	**Ammonia Plant** Revamping of Synthesis Gas Compressor in Ammonia-II Plant.	2016	30101.8 SM3/day of Gas	4000.00	2.2
10.	Installation of Ammonia Wash Unit in Ammonia-II.	2016	5655.7 SM3/day of Gas		3.7
11.	Modification in CO_2 Recovery Process aMDEA. Process in place of Benefield Process in Ammonia –I Plant.	2017	37405.1 Sm3/day of Gas	20773.00	5.6
12.	Replacement of Old Air Process Compressor Turbine with new one in Ammonia-I Plant.	2017	18.2 MTPD of Coal & 5926.0 Sm3/day of Gas	1443.50	2.5
13.	Replacement of Old Refrigeration Compressor Turbine with new one in Ammonia-I Plant.	2017	11.3 MTPD of Coal & 3689.8 Sm3/day of Gas	1443.50	4.1
14.	Replacement of Process Condensate Stripper with new MP Process Condensate Stripper in Ammonia-I Plant.	2017	24.4 MTPD of Coal & 7954.0 Sm3/day of Gas	1032.00	1.4

15.	Replacement of old Mixed Feed, Air & VAM Coil with new one in Primary Reformer Convection Section in Ammonia-I Plant.	2017	3162.3 Sm3/day of Gas	1044.00	5.1
16.	Installation of Ammonia recovery section to recover ammonia from off gases of synthesis loop in Ammonia-I Plant.	2017	1925.8 Sm3/day of Gas	1025.00	5.4
17.	Internal Revamping of Synthesis Gas Converter in Ammonia-I Plant.	2017	12.0 MTPD of Coal & 3901.0 Sm3/day of Gas	1331.00	3.6
18.	Modification in CO_2 Recover Process aMEDA Process in place of GV Process in Ammonia-II Plant.	2017	36024.7 Sm3/day of Gas	22586.00	6.4
19.	Installation of New MP Boiler at down steam of Kellogg's Old Converter in Ammonia – I Plant of Phulpur-I.	2018	5.1 MTPD of Coal & 825.4 Sm3/day of Gas	1200.00	4.7
20.	Installation of additional aMDEA Solution-Solution Plate Type Heat Exchanger and DM Water Preheater in Ammonia-Plant.	2018	31.1 MTPD of Coal & 5017.5 Sm3/day of Gas	150.00	0.4
21.	Installation of VAM System for CO_2 cooling in Urea – I Plant.	2018	7.1 MTPD of Coal & 1299.6 Sm3/day of Gas	833.00	4.0
22.	Replacement of Compressor from M/s Hitachi, Japan in 31 Unit of Urea-II Plant with new efficient CO_2 Compressor.	2018	11690.1 Sm3/day of Gas	2592.50	3.1
23.	Installation of Low-Pressure steam import to CDR Plant	2021	8266.2 Sm3/day of Natural Gas	41.0	0.2

	from Phulpur-I yard header.				
24.	Installation of higher capacity Ammonia Condenser (E-3522) to reduce the Ammonia Content at the outlet from Off Gas Absorber in Ammonia-II Plant.	2021	230.0 Sm3/day of Natural Gas	20.0	1.3
25.	Replacement of Methanator Effluent Cooler (115-C) in Ammonia-I Plant.	2021	3892.0 Sm3/day of Natural Gas & 9.5 MTPD of Coal.	120	0.2
26.	Installation of additional Cold Ammonia Pump (118-JB) in Ammonia-I Plant.	2021	154.2 Sm3/day of Natural Gas	35	1.7
27.	Replacement of Methanator Feed Preheater in Ammonia-I Plant of Phulpur-I Unit	2022	12106.3 Sm3/day of Natural Gas	123.0	0.1
28.	Revamping of Urea-II Cooling Tower of Phulpur-II Unit	2023	3743.4 Sm3/day of Natural Gas & 12.4 MTPD of Coal	800	3.2

ANNEXURE – VII A

Additional Measures/Investment Proposals for Environmental Improvement during Year 2023 - 2024.

1. Construction work of a Lake of capacity approx. 32000 m^3 (dimension: 120 m x 120 m x 2.25 m) is in going on position to recharge the ground water by rainwater harvesting in the Cordet area. A recharge shaft (bore) is planned to recharge the rainwater harvesting.

2. A proposal has been accepted by the Forest Department, Prayagraj (U.P.) for developing Miyawaki forest in a 0.5 Hectare area in IFFCO Phulpur premise to mitigate the air pollution, if any in the surrounding atmosphere. Marking of area and preparation of land soil, digging of pits and plantation work are planned to execute in 2023-24.

3. The laying of new effluent line is planned for irrigation/horticulture purpose of Neem Plantation area (Hybrid species) in Bramhputra sector of Ghiyanagar township.

4. Ash utilization in production of ash-clay brick has been established. Ash-clay bricks have many advantages over conventional clay bricks. Keeping in view, we are promoting brick kiln owner to mix fly ash with clay. In the long term this will give a better and new era for fly ash utilization.

5. In view of the U.P. Govt. G.O.No.:2/2019/881/81-5-2019-03/2019 dated 21.11.2019, we have planned to develop more greenbelt area in our IFFCO premises.

6. Renovation of Electrostatic Precipitator (ESP) of Boiler no.-2 is planned in FY 2023-24.

ANNEXURE - VII B

COST OF SCHEME RELATED TO ETP INSTALLED AT IFFCO PHULPUR

A. LIQUID EFFLUENT

Sl.No.	Measures	Cost (Rs. Lakh)	Year of Installation/ Operation
	UNIT - I		
01.	Neutralisation pit	**9.75**	1979
02.	Oxidation Pond and Septic tank (Various Locations)	**2.50**	1977 & 1979
03.	Oil Separators (Various Locations)	**4.20**	1980
04.	Ash Ponds and Ash Settling pits (Including Cost of Ash Pond expansion and Modification)	**43.47**	1980
05.	Distillation Column for Urea Waste Water and Deep Urea Hydrolyser including Cost of On - Line instruments.	**245.00**	1980 & 1990
06.	First New Ash Pond (Including Cost of Land acquisition and Pond Construction)	**44.07**	1990
07.	Guard Ponds	**23.00**	1986 & 1987
08.	Guard Pond No. 1 expansion	**1.72**	1991
09.	Recycle System for I.G. Plant effluent from I.G. Plant to Deashing sump/Water Softening Plant.	**12.00**	1988 & 1991
10.	Recycle System at Guard Pond out let for final treated effluent (Recycle of treated effluent to Power Plant for deashing, CORDET for irrigation and to coal yard for spraying etc.)	**22.0**	1990 & 1994
11.	Urea Plant vessel Washing pumping to catalyst Reduction Pit.	**2.5**	1991
12.	Pumping of Jacket Water (Ammonia Plant) and flash tank condensate (Power Plant) to Ammonia Cooling Tower.	**0.25**	1991

13.	Ammonia Plant Upset condition effluent pumping to catalyst Reduction pit.	**2.0**	1995
14.	On - Line pH meter at Guard Pond outlet.	**0.30**	1992
15.	Recycle of Raw Water pump house ejector discharge into water softening plant.	**0.20**	1994
16.	Construction of second New Ash Pond for fly ash Disposal.	**190.0**	1995
17.	Installation of Pipe lines in CORDET, in Ash Pond and in Township to recycle treated liquid effluent.	**49.75**	1994 & 1995
18.	Installation of treated effluent pipe line to old ash pond for spraying.	**15.00**	1995
19.	Installation of treated effluent pipe line around second New ash Pond for green belt irrigation.	**12.0**	1996
20.	Effluent line from Guard Pond to New Ash Pond.	**42.0**	1995
21.	Construction of Chromimum sludge disposal pit.	**4.17**	1997
22.	Installation of New Sewage Treatment Plant.	**151.00**	1997
23.	Recycle of R V Sealing Water to Ammonia Cooling Tower.	**1.75**	1998
24.	Plastering & FRP of R.O. Feed Pit, Reject Pit & Structurals.	**47.7**	1998
25.	Environment Management of Liquid effluent based on Reverse Osmosis Technology and Recycle System, and effluent segreegation scheme.	**880.47**	1998
26.	Lab Instrument	**83.13**	1995, 1998, 2002, 2003, 2004, 2005, 2006, 2009, 2010,2012,2014, 2017, 2019, 2020, 2021, 2022 & 2023
27.	Installation of Floor Washing (From Effluent Water) system in Power Plant - I.	**1.0**	1998
28.	Recycle system of continuous Blow Down of Power Plant.	**2.4**	1999

29.	Effluent Recycle line in Plant, Township & Cordet.	**9.54**	1999, 2001, 2003 & 2004
30.	Recycle system of hydrolysed water of Urea Plant - I through CPU.	**4.00**	2000 & 2001
31	Construction of a new Guard Pond and capacity enhancement of existing Guaard Pond no. 1.	**44.79**	
32	Construction of additional effluent neutralisation pit	**10.76**	
33	Installation of Rain Water Harvesting System in Guest House, Central School and residential area of Township.	**40.74**	2006, 2009,2012
34	Effluent Recycle line from Guard Pond to Township	**50.00**	2009
35	Revamping of Guard Pond	**47.00**	2011
36	On line monitoring Instrument for Effluent Water	**11.90**	2015
37	Oil Skrimmer for Waste Oil Seperation from Oily Effluent	**0.97**	2017
38	Modification of Storm Water Drain System.	**72.71**	2018
39	Installation of Vertical Centrifugal pumps for blow down pit of ACT-I & UCT-I.	**16.19**	2018
40	Installation of PTZ Camera at Guard Pond Outlet.	**1.29**	2020
41	Old underground regeneration effluent line is changed with new SS pipe line.	**35.15**	2021
42	Installation of New Borewell Data Monitoring System(SCADA System	**26.82**	2022
Cost of E.T.P. for Unit-I (Liquid Effluent)		**2265.19**	
	UNIT - II		
01.	Distillation tower with Urea Hydrolyser and feed pump.	**510.03**	1997
02.	Disc. Oil Separator Unit	**40.05**	1997
03.	Effluent Treatment Plant with stripping Unit.	**188.00**	1997
04.	Process condensate stripper.	**82.51**	1997
05.	Condensate Polishing Unit.	**300.00**	1997
06.	Construction of another collection tank (Cap - 400 M3)	**15.00**	2000 & 2001

07.	Installation of water spraying system in Ammonical Guard Pond.	**5.50**	2007
8	Installation of vertical centrifugal pumps for blow down pit of ACT-II.	**8.15**	2018
	Cost of ETP for Unit - II (Liquid Effluent).	**1149.24**	
Total Cost of ETP (Liquid Effluent)		**3414.43**	

[B] **AIR EMISSION**

Sl.No.	**Measures**	***Cost (Rs. Lakh)***	***Year of Installation/ Operation***
	UNIT -I		
01.	Electro-static precipitator 3 Nos. (Steam Generation Plant)	**185**	1980
02.	Chimney (Power Plant)		
03.	Cyclone Separators		
04.	Flare Stack (Ammonia Plant)		
05.	Oxygen Analyser in flue gas system.	**4.50**	1983
06.	Ammonia scrubber for vent gases in Urea Plant.	**2.00**	1988
07.	Ambient Air Monitoring Stations - 4 Nos. and sampling port & plateform Boilers Chimney.	**3.60**	1988
08.	High Volume Sampler, Monitoring equipments & Monitoring kit etc.	**42.08**	1985, 1996, 2003, 2004, 2005, 2006, 2007, 2010, 2012,2013,2015, 2016 & 2017
09.	Environment Laboratory (Including Cost of Meteorological Instruments & equipment)	**29.56**	2015, 2016,2017,2018 & 2019
10.	Vth Ambient Air Monitoring Station (Including Civil work & Instrumentation).	**1.40**	1998

11.	Installation of dry ash collection system.	**123.0**	1999
12.	Installation of New Chimnies of substantial height in Ammonia - I Plant.	**313**	2000
13.	Ammonia Sensor	**24.96**	2000, 2014, 2021
14.	Installation of Vent Silencers in Ammonia Plant.	**24.43**	2001, 2011, 2012
15.	Installation of Vent Silencers in Power Plant.	**4.84**	2001
16	On line monitoring instrument for Boiler No. 1, 2 & 3.	**11.40**	2015
17	Modification of E.P. in Boiler No. 1 & 3	**4190.00**	2017, 2018
18	SOx-NOx Analyser for flue gas stack of Boiler No. 1 in Power Plant.	**20.50**	2021
	Total Cost for Unit - I (Air Emission) =	**4980.27**	
	UNIT - II		
01.	S.P.G.Chimney, Reformer Stack G.T. Main Stack, Civil Work, Piping, Control Valves, Instrumentation, Electrical Work of Pollution Abatement Factilities.	**721.62**	1997
02.	Urea Plant vent stack 2nd.	**44.07**	1997
03.	Flare Stack	**93.49**	1997
04.	Analyser & leak detector.	**95.00**	1997
05.	Lab equipments including one ambient air monitoring station.	**37.61**	1997
06.	Installation of vent silencor at the vent of deaerator in Amm.-II.	**1.12**	1999
07.	Vent scrubber in Urea - II	**7.85**	2000
08.	Installation of vent silencer in CO2 line at B.L. of Urea Plant - II.	**3.58**	2000
09.	Installation of vent silencer in CO2 vent line in 31 / 41 area and steam heating line of 31 / 41 CO2 compressor in Urea Plant - II.	**3.22**	2001

10.	Installation of vent silencor in CO2 vent silencer in Ammonia Plant -II.	**5.22**	2001
11.	Installation of Vent Silencers in Power Plant.	**2.38**	2001
12.	Installation of PGR in Ammonia-II	**393.98**	2001
13.	Installation of Carbon Dioxide Recovery Plant.	**6050**	2006
14	Installation of Ammonia Sensor in Urea -II	**20.43**	2009, 2021
15	On line monitoring instrument for Boiler No.- 4	**3.80**	2015
	Cost for Unit - II (Air Emission)	**7483.37**	
Total Cost of ETP (Air Emission)		**13184.86**	
	Total Pollution Control Cost (Liquid Effluent & Air Emission both)	**16599.29**	
[C]	Fly Ash Brick Plant of capacity 3000 Brick/day	**18.00**	1993
[D]	Expenditure on Green Belt Development (Till March 2021)	**211.4**	

ANNEXURE – VIII

ENVIRONMENT MANAGEMENT AND POLLUTION CONTROL AT IFFCO PHULPUR

Indian Farmers Fertiliser Co-operative Limited, popularly known as IFFCO, emerged as the pioneering venture on the horizon of fertiliser manufacturing & marketing. It is directly helping in attaining self-sufficiency in food grain production in India. IFFCO has built four state - of - the - art fertiliser plants at Kalol and Kandla in Gujarat and Phulpur and Aonla in Uttar Pradesh and a country - wide marketing network for the distribution of fertiliser right to the farmer's doorstep. All the four manufacturing units are accredited with ISO 14001 certification. Recently IFFCO has acquired a NPK / DAP and Phosphoric Acid facility at Paradeep in Orissa.

IFFCO's Phulpur Unit is located 34 Km away from Allahabad in the State of Uttar Pradesh. IFFCO Phulpur has presently in operation, one stream of 2300 MT/Day Urea Plant commissioned in 1980 and another stream of 3490 MT/Day Urea Plant commissioned in 1997, based on Snamprogett's patented Ammonia Stripping Process. The Ammonia Plants have been engineered and constructed by MW Kellogg (USA) and Haldor - Topsoe (Denmark), respectively and are based on RLNG / naphtha as the feed stock.

Waste Management, Natural Resource conservation, Environment Protection and its enrichment have always been of paramount importance to the IFFCO Phulpur Unit. We have adopted "Eco-friendly / Low Pollution Technology" wherever possible. Due care was taken at design stage itself to select best available technology that produce low or negligible Waste, conserve resources and reuse the treated waste to the maximum possible extent. The environment quality and pollution control at IFFCO Phulpur is efficiently managed by providing all necessary and sufficient pollution control measures for liquid effluent, air emission, domestic sewage and solid wastes.

IFFCO Phulpur unit has established and implemented Environment Management System as per International Organization for Standardization (ISO 14001:2015). This certification includes not only the factory premises but also the residential Township, Hospital and Farmers Training Institute, located adjacent to the factory premises.

The discharge of liquid effluent either over land or into any water body is becoming more critical day by day. The decreasing trend of ground water level is also very important feature of discussion throughout India. The recycling / reuse of effluent water can solve both the problems. By implementation of various recycling and reuse schemes of treated effluent water the freshwater consumption has been reduced to 5.41 M^3/T of Urea for the year 2022-23. With the continuous efforts and its endeavors towards waste management IFFCO Phulpur has achieved "Zero Liquid Effluent Discharge" from premises.

For air emission control, electrostatic, precipitators, scrubbers for gaseous emissions, cyclone dust collectors, natural draft Prill Tower of substantial height, flare stacks, chimneys of adequate height for steam generation units have been installed and the same are operated efficiently. The stack emissions are always well within the prescribed limits stipulated by the State Pollution Control Board & MOEF Standards. The Ambient air quality in surrounding area of the factory is well within the limits prescribed for rural and residential areas.

The main environmental programs and initiatives taken by Unit are as follows:

- Adoption of CO_2 Recovery Process-aMDEA Process in place of existing GV Process in Ammonia Plant.

- Adoption of non-Chromate cooling water treatment. This has completely eliminated the menace of hazardous heavy metals like chromium.

- Fuel change over from Naphtha to LNG in reformer of Ammonia Plant-I&II. This reduces the SO_2 and CO_2 emission from the stacks.

- Installation of Carbon Dioxide Recovery plant for recovery of 450 MTPD of CO_2 (Green House Gas) from flue gases of Primary Reformer and recycled into plant process. This reduces the CO_2 emission from the stacks.

- Utilization of ash from coal - fired boilers for :

  (i) 'Usar' Land reclamation.
  (ii) Manufacture of fly ash bricks and clay – fly ash bricks.
  (iii) Manufacture of Portland Pozzolana Cement by cement industries.
  (iv) Back –filling of low – lying areas.

- Installation of dense phase conveying system for disposal of dry fly ash in eco-friendly closed tankers to cement plants.

- Implementation of various water conservation measures by total recycle/reuse of treated effluents.

- Installation of a unique effluent treatment - cum – recycle plant based on Reverse Osmosis Technology to treat industrial liquid effluents.

The effluent treatment & Recycle plant based on Reverse Osmosis technology is a unique and pioneer effluent treatment plant in Indian Fertilizer Industry to treat the industrial liquid effluent. This plant is first of its kind in the country and its technology has been provided by M/s Hydranautics, California, U.S.A. one of the leading organisations of the Reverse Osmosis Technology.

- Installation of sewage treatment -cum -recycle plant for treatment and reuse of treated sewage water for process requirements.

- Installation of five ambient air monitoring stations for monitoring of ambient air quality.

- Substantial tree plantation under green belt development program (50 to 200 m wide) to keep the environment quality in its most natural condition.

- Environmental awareness training programs for Township residents and surrounding villagers.

Our Environment Laboratory is recognized by the State Pollution Control Board for liquid effluent monitoring because of its good monitoring capability.

The Unit is also engaged in socio-economic uplift of the surrounding villagers under Integrated Rural Development Program and Welfare Scheme Some of them are as follows:

(i) Construction of approach roads, construction of rooms & boundary walls in schools & construction of toilets for villagers in surrounding area.

(ii) Organise various community development and welfare programs like Kisan Mela, Pashu Mela, medical assistance, eye camps, health and family planning camps etc.

(iii) Agricultural extension programs e.g., balance fertilization program, soil testing, Seed treatment, Veterinary medical check-ups camps, Animal husbandry and Pisciculture campaigns.

(iv) Organise training classes for tailoring skills for women, handicrafts, literacy programs, artisan skills training programs in surrounding villages.

IFFCO Phulpur Unit has won prestigious Awards from time to time, which are ample testimony of its excellent Environment, Safety & Energy Management System. Some of which are listed here under:-

Year 1990 - 91

- First Prize for Energy conservation in Fertiliser Sector from Ministry of Energy Deptt. Of Power Govt. of India.
- NPC Productivity Award for the Second-Best Productivity Performance from National Productivity Council of India, New Delhi.
- "National Safety Award" – from Ministry of labour, Government of India.

Year 1991 - 92

- Special commendation Certificate for Energy Conservation in Fertiliser Sector from Deptt. Of Power, Govt. Of India.
- "National Safety Award" – from Ministry of labour, Government of India.

Year 1992 - 93

- Special commendation Certificate for Energy Conservation in Fertiliser Sector from Deptt. of Power, Govt. of India.

Year 1993 - 94

- "Best Technical Innovation Award" from Fertiliser Association of India, New Delhi.
- "Best Environmental Protection Award"- from Fertiliser Association of India, New Delhi.
- "Second Jawaharlal Nehru Memorial Award"- from International Greenland Society, Hyderabad.
- "Best Environment Award" - from Rotary Club of Allahabad.

Year 1994 - 95

- "Production Performance Award in Nitrogenous Fertiliser Plants" – from Fertiliser Association of India, New Delhi.
- "NPC Productivity Award for Second Best Productivity Performance during the year 1994 - 95 from National Productivity Council of India, New Delhi.

Year 1996 - 97

- Best Environmental Protection Award - from Fertiliser Association of India, New Delhi (Awarded in Dec. , 1997).

Year 1997 - 98

- Best Environmental Protection Award - from Fertiliser Association of India, New Delhi.

Year 2001 - 2002

- TERI Corporate Environmental Award amongst Rs. 500 Crores & above Industries.
- Best Environmental Excellence Award in Fertiliser Sector – from Indo-German Greentech Foundation.
- Best Technical Paper Award by FAI on the Paper- "A Case of Reverse Rotation in CO2 Compressor Train"..

Year 2003 - 2004

- "National Energy Conservation Award" - from Ministry of Power.

Year 2004 - 2005

- National Energy Conservation Award - from Ministry of Power.
- Best Overall Performance of an operating unit for Nitrogen (Ammonia Plant) Runner-up award for 2003-04 – from FAI New Delhi.
- Best Technical Paper Award by FAI on the Paper- "Cost reduction and Power savings in Utilities in a Mega Fertiliser Complex".

Year 2005 - 2006

- Prestigious "Nationa Energy Conservation Award- 2005" (certificate of Mertit in the Fertiliser Secotor).
- Prestigious Rajiv Ratna National Award - 2005 for Excellence in Indian Industries – "Best Pollution Control Gold Award" from What Hails Public Sector Today (National Magazine).
- Prestigious National Award for "Excellence in Energy Management – 2005" by Confederation of India Industry (CII)- Sohrabji Godrej Green Business Centre-Chennai.

Year 2006 - 2007

- Phulpur Unit has received following awards from "What Hails Public Sector Today" in the Ceremony held at Institution of 'Engineers' (India) Ltd., Hyderabad on June 25, 2006.
- Indira Gandhi Memorial National Award - 2006 for Excellence in Indian Industries "Best Pollution Control Implementation Gold Award".
- "Best Chief Executive Gold Award" to Shri M.Rajashekharaiah, SGM, IFFCO-Phulpur Unit.
- Phulpur Unit has bagged "Second Prize" of the prestigious "National Energy Conservation Award-2006" in the Fertiliser Sector given by Bureau of Energy Efficiency, Ministry of Power, Government of India. The award was presented on December 14, 2006.
- Phulpur Unit has bagged the Prestigious National Award for "Excellence in Water Management – 2006" by Confederation of India Industry (CII)- Sohrabji Godrej Green Business Centre- Hyderabad on December 22, 2006
- An article titled "Implementation of energy Saving Project at IFFCO Phulpur Unit" published in March 2006 of India Journal of Fertilisers (Fertiliser News) has been awarded First prize in the Production/Technology discipline, amongst the papers published during September 2005 to August 2006 by Fertiliser Association of India (FAI), New Delhi.

Year 2007 - 2008

- Phulpur Unit –I has bagged "First Prize" of the prestigious "National Energy Conservation Award- 2007" in the Fertiliser Sector given by Bureau of Energy Efficiency, Ministry of Power, Government of India. The award was presented on December 14, 2007.
- Phulpur Unit –II has bagged "Second Prize" of the prestigious "National Energy Conservation Award- 2007" in the Fertiliser Sector given by Bureau of Energy Efficiency, Ministry of Power, Government of India. The award was presented on December 14, 2007.

- Phulpur Unit has bagged "First Prize" for Overall Best Production in Nitogenous Fertiliser Sector by "Fertiliser Association of India". The award was presented on 5th Dec. 2007 in New Delhi.
- Phulpur Unit-I has received the "National Award for Excellence in Energy Management-2007" from Confederation of India Industry (CII) in the Ceremony held at Confederation of Indian Industry (CII), Hyderabad on September 13, 2007.

Year 2008 – 2009

- Phulpur Unit –I has bagged "First Prize" of the prestigious "National Energy Conservation Award- 2008" in the Fertiliser Sector given by Bureau of Energy Efficiency, Ministry of Power, Government of India. The award was presented on December 14, 2008.
- Phulpur Unit has bagged "First Prize" for Overall Best Production in Nitogenous Fertiliser Sector by "Fertiliser Association of India". The award was presented on 5th Dec. 2008 in New Delhi.
- Phulpur Unit-I has bagged the Prestigious National Award for "Excellence in Energy Management-2008" by Confederation of India Industry (CII on September) 17, 2008.

Year 2009 - 2010

- Golden Jubilee Award in Recognition & Appreciation of Extraordinary Accomplishment & Contribution to the Nation from Chamber of Commerce & Industry, (Eastern U.P.,Allahabad) on 31st Oct. 2009..

Year 2010 - 2011

- Phulpur Unit –I has bagged, "First Prize" of the prestigious "National Energy Conservation Award-2010" in the Fertiliser Sector given by Bureau of Energy Efficiency, Ministry of Power, Government of India. The award was presented on December 14, 2010.
- Phulpur Unit has won "National Award for Prevention of Pollution" for the year 2008-09 by Ministry of Environment & Forests, Government of India.

- Phulpur Unit has bagged, "Runner-up Prize" for Overall Best Production in Nitrogenous Fertiliser Sector by "Fertiliser Association of India."
- Phulpur Unit has bagged, the Prestigious National Award for "Excellence in Energy Management – 2010" by Confederation of Indian Industry (CII).

Year 2011 – 2012

- 1st Prize – "Best Production performance Award" by FAI, New Delhi.
- "Environment Protection Award" by FAI, New Delhi.
- "National Safety Award" by Ministry of Labour & Employment, GOI.
- Award for "Excellence in Energy Management 2011" by Confederation of India Industry (CII).
- "Innovative Environment Protection Award" by Confederation of Indian Industry (CII).

Year 2012 – 2013

- 2nd Prize "National Energy Conservation Award- 2012", by BEE, Ministry of Power.
- "Best Production Performance Award for Nitrogenous Fertiliser Plant – 2012" by FAI, New Delhi
- IFFCO Phulpur Unit, has received "National Award for Excellence in Energy Management-2012", by Confederation of Indian Industry (CII).
- "Golden Peacock Environment Management Award-2012", by Institute of Engineers, New Delhi.
- Phulpur Unit has bagged, "National Energy Conservation Award-2012" by BEE, Ministry of Power.
- Phulpur Unit has bagged, "Excellence in Energy Management – 2012" by Confederation of Indian Industry (CII).

Year 2013 – 2014

- "Greentech Gold Award" – 2013 for Safety by Greentech Foundation.

Year 2014 – 2015

- 2nd runner up award of the biennial "IFA Green Leaf Award for Safety, Health and Environment (SHE)" excellence in fertilizer production. The award was conferred by International Fertilizer Association on 24th March, 2015.
- "Indira Gandhi Paryavaran Puraskar" for 2011 by Ministry of Environment, Forest and Climate Change on 2nd Feb. 2015. The Award includes a Trophy, a Citation and a Cheque of Rupees Five Lakhs.
- FAI best technical innovation award. The award was conferred by FAI on 10th December – 2014.
- Joint runner-up for FAI Environment Protection Award in Nitrogenous Fertiliser. The Award was conferred by FAI on 10th December 2014.

- Excellence Award" for creating employee creativity through continuous improvement by India National Suggestion Scheme Association (INSSAN) on 23rd August 2014.
- "Greentech Safety Award- 2014: Gold Award in the Fertiliser Sector" by Greentech Foundation on 13th September 2014.
- "15th Annual Greentech Environment Award 2015" by Greentech Foundation on 28th January 2015.

Year 2015 – 2016

- Winner for 9th Inter Unit Cultural Festival 2015.
- Winner for FAI Safety Award for excellence in Safety for the year 2014-15.
- Joint Winner for FAI Environment Protection Protecton Award for the year 2014-15.
- Certificate of Appreciation for safety Award-2014 by NSCI in Occupational Safety & Health for the period 2011 to 2013 in Manufacturing Sector.
- "Product Steward Excellence" certification by IFA under IFA Protection & Sustained Product Stewardship Programme..
- Winner for God Award in Fertiliser Sector in the "14th Annual Greentech Safety Award – 2015" by Greentech Foundation, New Delhi for outstanding achievements in Safety Management.
- Runner-up National Safety Award for the performance year-2013 scheme-II & Schedule 03 (Manufacture of Chemicals & Chemical Products including Fertiliser) by Directorate General Factory Advice Service and Labour Institutes (DGFSLI), Mumbai, under the Ministry of Labour and Employment. Government of India.
- National Energy Management Award 2015 from Confederation of Indian Industry (CII), for Excellence in Energy Management.
- Winner for Silver Award in Fertiliser Sector in the 16th Annual Greentech Environment Award-2015.
- IFFCO Phulpur Employees have won the following Awards in the 17th National Creativity Summit from India National Suggestion Schemes Association, Northern India Chapter (INSAAN-NIC) held in August 2015.
- Par Excellence Award for Case Study Presentation (Executive Category), Distinguished Award for Case Study Presentation (Non-Executive Category).
- Distinguished Award Poem (Hindi).
- Merit Award Essay (English), Idea Champion Award.
- IFFCO Phulpur Employees have won the following Awards in the 26th National Convention of India National Suggestion Schemes Association (INSSAN), Pune held in January 2016.
- 2nd Prize- Presentation (Process Improvement Category).
- Merit Award-Presentation (Cost & Time saving category).
- Merit Award – English Slogan.

Year 2016 – 2017

- Winner for Gold Award in Fertiliser Sector in the 17th Annual Greentech Environment Award-2016.

- 2nd Prize for Phulpur –I in National Energy Conservation Award-2016.
- Winner for FAI Safety Award in Nitrogenous Fertiliser-2016.
- Joint Winner for FAI Environment Protection Award in Nitrogenous Fertiliser- 2016.
- "Energy Efficient Unit" for both Phulpur Unit-I & Phulpur Unit-II at the 17th National Award for Excellence in Energy Management by Confederation of India Industry (CII).
- Winner for Platinum Award in Fertiliser Sector in the 15th Annual Greentech Safety Award-2016" by Greentech Foundation, New Delhi and the award is conferred for outstanding achievements in Safety Management after having won three GOLD Award in a row in 2013, 2014 and 2015.
- Certificate of Appreciation for safety Award-2015 by NSCI in Occupational Safety & Health for the period 2012 to 2014 in Manufacturing Sector.
- Employees of Phulpur Unit have won the following 8 Nos. Awards in the 18th National Creativity Summit from 2016 held at SCOPE Convention Centre, New Delhi during 19th & 20th August 2016.
  (i) Excellence Award (Case Study Presentation) Non-Executive Category.
  (ii) Merit Award (Case Study Presentation) Non-Executive Category.
  (iii) Distinguished Award (Case Study Presentation) Non-Executive Category.
  (iv) Distinguished Award (Essary – English)
  (v) Excellence Award (Poem – Hindi)
  (vi) Excellence Award (Poster-Hind)
  (vii) Distinguished Award (Poem-English)
  (viii) Distinguished Award (Poem-Hindi)

Year 2017 – 2018

- 1st Prize for Phulpur –II in "UP State Energy Conservation Award – 2017" from Uttar Pradesh New and Renewable Energy Development Agency, Government of Uttar Pradesh, India.
- Certificate of Merit for Phulpur –II in National Energy Conservation Award-2017 from BEE-2017.
- "Energy Efficient Unit" for Phulpur Unit-I at the 18th National Award for Excellence in Energy Management by Confederation of India Industry (CII).
- Winner for Gold Award in Fertiliser Sector in the "16th Annual Greentech Safety Award-2017" by Greentech Foundation, New Delhi for outstanding achievements in Safety Management.
- Certificate of Appreciation for safety Award-2016 by NSCI in Occupational Safety & Health for the period 2013 to 2015 in Manufacturing Sector.
- Employees of Phulpur Unit have won following 6 Nos. awards in 19th National Creativity Summit 2017 held at SCOPE Convention Centre, New Delhi during 22nd 23rd July 2017.
  (i) Excellence Award (Presentation) Executive Category.
  (ii) Excellence Award (Essay: English)
  (iii) Distinguished Award (Slogan : English)
  (iv) Excellence Award (Poster)
  (v) Par Excellence Award (Poem : Hindi)
  (vi) Merit Award (Slogan : Hindi)

Year 2018 – 2019

- Winner for FAI Best Production Performance Award-2018.
- Winner for FAI Environment Protection Award in Nitrogenous Fertiliser – 2018.
- Phulpur Unit- II has been announced as the Winner in "UP State Energy Conservation Award – 2018 from Uttar Pradesh New and Renewable Energy Development Agency, Government of Uttar Pradesh, India.
- "Product Steward Excellence" Certification by IFA under IFA Protection & Sustained Product Stewardship Programme.
- "Energy Efficient Unit" for Phulpur Unit-I at the 19th National Award for Excellence in Energy Management by Confederation of India Industry (CII).
- Winner for Gold Award in Fertiliser Sector in the "18th Annual Greentech Safety Award-2018".
- Winner for Platinum Award in Fertiliser Sector in the 17th Annual Greentech Safety Award-2018" by Greentech Foundation, New Delhi for outstanding achievements in Safety Management.
- Runner-up for "HR Best Practices" – 2018 by National Institute of Personnel Management (NIPM).
- 1st Runner-up for Phulpur Unit in Maximum Praticipation in the 8th Inter Unit Innovation & Crativity meet held at Gurgaon on 21th June 2018.
- Two Teams from IFFCO Phulpur Unit have won Third Prize and Bronze Trophy each for the Best Suggestions in the "INSSAN-29th National Convention held at Pune on 18th & 19th January 2019.

Year 2019 – 2020

- "Energy Efficient Unit" for Phulpur Unit-I at the"20th National Award for Excellence in Energy Management – 2019" by Confederation of Indian Industry (CII)
- Winner Trophy in 19th Greentech Environment Award 2019.
- Winner Triogt 18th Annual Greentech Safety Award 2019 by Greentech Foundation, New Delhi for outstanding achievements in Safety Management
- Phulpur Unit received Green Rating Project Award "3 Leaves" by Centre for Science & Environment (CSE) on the basis of their environment performance.
- Team from IFFCO Phulpur Won "1st Runners –Up" Prize in the "IFFCO INTER -UNIT QUIZATHON-2019.
- Phulpur Unit Won a "Merit Award" in the "9th Annual Inter Unit Innovation and Creativity Meet".
- IFFCO Phulpur Teams Won Gold Trophy for "Case Study Presentation Contest", 3rd Prize for "Best Suggestion Contest Category-II" and Merit Award for "Best Exibit Contest-2019" in the 30th National Convention by INSSAN from 16th to 18th January-2020 at Mumbai. The Awardee also received token of Appreciation by Hon'ble Managing Director Dr.U.S. Awasthi on 71st Republic Day at Phulpur Unit on 26th January, 2020.

Year 2020 – 2021

- Runner-up Trophy for "FAI best Production Performance Award -2020" in Nitrogenous Fertiliser Category on 9th Dec., 2020 at New Delhi.
- First Prize in "National Energy Conservation Awards-2020" by Bureau of Energy Efficiency (BEE), Ministry of Power. The award has been given in appreciation of the achievements in Energy Conservation in the Fertilizer on 11th January, 2021.
- IFFCO Phulpur-I Unit has been awarded as "Excellent Energy Efficient Unit" by Confederation of Indian Industry (CII Hyderabad for "CII 21st National Award for Excellence in Energy Management 2020".
- IFFCO Phulpur-II Unit has been awarded as "Energy Efficient Unit" by Confederation of Indian Industry (CII) Hyderabad.
- Winner of "20th Greentech Environment Award 2020" by Greentech Foundation on 11th February 2021. The award has been given for outstanding achievements in "Environment Protection" category.
- Winner of 19th Annual Greentech Safety Award -2020" for outstanding achievements in Safety Excellence.

Year 2021-22

- IFFCO Phulpur-II Unit has been awarded as "Energy Efficient Unit" by Confederation of Indian Industry (CII) Hyderabad.
- IFFCO Phulpur Unit has been awarded as "Winner" of "Greentech Energy conservation Award 2021" by Greentech Foundation on 26th August 2021.
- IFFCO Phulpur Unit has selected the Prestigious "Platinum Award" for Grow Care India Energy Efficiency Award 2021 in Energy Efficiency category by Grow Care India, New Delhi in Fertilizer Sector.
- IFFCO Phulpur Unit has selected the Prestigious "GOLD Award" for Grow Care India Environment Award 2021" in Environment category by Grow Care India, New Delhi in Fertilizer Sector.
- IFFCO Phulpur Unit has been awarded as "Winner" of "Greentech Safety Award 2021" for outstanding achievements in Occupational Health Practices by Greentech Foundation on 07th March 2022 at Srinagar(J&K), India.

Year 2022-23

- Both Phulpur-I & II Unit has been awarded as "Energy Efficient Unit" in 23rd National Award for Excellence in Energy Management–2022 by Confederation of Indian Industry (CII) at New Delhi.
- IFFCO Phulpur Unit received prestigious "Platinum Award" for Energy Efficiency, "Gold Award" for Environment Management and "Gold Award" for OHS Management from Grow Care India on 23rd July 2022 at Chandigarh.
- Phulpur-I Unit has been recognized as a "Top Performer Designated Consumer" for Fertiliser Sector of PAT Cycle II under National Mission for Enhanced Energy Efficiency (NMEEE).

- IFFCO Phulpur Unit Laboratory has been accredited with the Standard ISO/IEC 17025:2017 by NABL (National Accreditation Board for Testing and Calibration Laboratories) a Constituent Board of Quality Council of India.
- IFFCO Phulpur Unit has been awarded as "Winner of 22nd Annual Greentech Environment Award 2022" by Greentech Foundation on 24th August 2022 at Guwahati, Assam. The award has been given for outstanding achievements in "Environment Protection" category.
- Indian National Suggestion Schemes' Association (INSSAN) has organized it's 32nd National convention on the theme: "Creativity & Innovation of Employees for Organizations Business success" on 2nd and 3rd February 2023 at Scope Convention Centre, New Delhi. During the event, IFFCO Phulpur Team won "Par Excellence Award, Excellence Award and Distinguish Award" for Case Study Presentation. Phulpur Team also won "3rd Prize" in 11th Inter Unit creativity meet on 05 and 6th Feb. 2023 at New Delhi.
- 23rd All India Creativity Summit by INSSAN held on 07th and 08th July 2022 at SCOPE Convention Centre, New Delhi. During the event, IFFCO Phulpur Team won "Par Excellence Awards" for Case Study Presentation.