

## **ENVIRONMENTAL STATEMENT FOR THE PERIOD 01.04.2016 TO 31.03.2017**

*(Submitted as per Rule-14 of the Environment (Protection) Amendment Rules, 1993 of the Environment (Protection) Act, 1986 (29 of 1986) published vide Notification dated 22.04.1993-G.S.R. 386(E) in the Gazette of India (Extraordinary) Part-II Section-3 Subsection (i). No.155 dated 28.04.1993 by the Ministry of Environment and Forests, Government of India: read with the Notification dated 13.02.1993 G.S.R. 329 (E) of the Gazette of India (Extraordinary) Part-II Section-3 Subsection (i) No. 120 dated 13-03-1993)*

### **Form V** (See Rule 14)

#### PART "A" GENERAL INFORMATION

1. Company Name : Brahmaputra Valley Fertilizer Corporation Limited, Namrup
2. Occupier's Name : Brahmaputra Valley Fertilizer Corporation Limited, Namrup
3. Registered Office of the Company with address : Brahmaputra Valley Fertilizer Corporation Limited, Namrup  
P.O. Parbatpur, Dist. Dibrugarh, Assam  
Pin 786623
4. Factory Address : Brahmaputra Valley Fertilizer Corporation Limited, Namrup  
P.O. Parbatpur, Dist. Dibrugarh, Assam  
Pin 786623
5. Industry Category : Nitrogenous Fertilizer (Continuous Chemical)
6. Production Capacity :

Name of Product	As per Consent (MT / Year)	Production (MT/Year) As per actual	
		2015-16	2016-17
Urea (Namrup-II)	240000	66277	60162
Urea (Namrup-III)	270000	256368	250443

7. Establishment Year : 1969
8. Date of Last Environmental Statement submitted : 05-Sep-16

PART "B"  
WATER AND RAW MATERIAL CONSUMPTION

B-1. Total Water Consumption (M<sup>3</sup>/day)

Source Name	Type of Water	Namrup-II		Namrup-III	
		2015-16	2016-17	2015-16	2016-17
Near by Dilli River (Dishang River)	Process	1562	1473	1727	1754
	Domestic	3469	3460	3183	3174
	Cooling	9826	8867	8363	8382

B-2. Water Consumption per unit of Product (M<sup>3</sup>/MT)

Name of the Product	Water Consumption per Unit of Product (M <sup>3</sup> /MT)	
	2015-16	2016-17
Urea (Namrup-II)	51.55	51.56
Urea (Namrup-III)	11.81	12.14

B-3. Raw Material Consumption (MT/MT)

Name of Raw Material	Name of the Product	Quantity of Raw Material per unit of the product manufactured (MT/MT)	
		2015-16	2016-17
Natural Gas	Urea (Namrup-II)	2.08	2.05
	Urea (Namrup-III)	0.95	1.00

PART "C"  
POLLUTION DISCHARGED TO ENVIRONMENT PER UNIT OF OUTPUT

C-1. Water Pollution

Pollution Parameter	Prescribed Limit for Inland Surface Water (mg/litr.)*	Quantity of Pollutants Discharge (Kg/day)	Concentration of Pollutants in Discharge (mg/litr.)	Percentage of Variation from Prescribed Limit
B.O.D	30	105	27.66	-8%
C.O.D	250	531	139.33	-44%

\* As per CPCB's General Standard for inland surface water. No prescribed limit for effluent.

C-2. Air Pollution (Flue Gas)

Name of Parameters	Prescribed Limit (mg/NM <sup>3</sup> )	Quantity of Pollutant Discharge (Kg/day)	Concentration of Pollutants in Discharge (mg/NM <sup>3</sup> )	Percentage of Variation from Prescribed Limit
SO <sub>2</sub>	80			Parameters are well within limit
(a) Namrup-II		1.194	1.222	
(b) Namrup-III		1.781	1.291	
NO <sub>2</sub>	400			
(a) Namrup-II		0.877	0.900	
(b) Namrup-III		1.249	0.904	

PART "D"  
HAZARDOUS WASTES  
[As Specified under Hazardous Wastes(Management & Handling) Rule 1989]

Description	Total Quantity Generated	
	2015-16	2016-17
Used Oil (in KL)	-	1.13
Spent Catalyst (in MT)	-	-
Waste Oil (in KL)	-	10.00

PART "E"  
SOLID WASTES

Description	Total Quantity (in MT)	
	2015-16	2016-17
Spent Resin	Nil	Nil
Water Treatment Plant Sludge	Nil	Nil

PART "F"  
CHARACTERISTICS OF HAZARDOUS / SOLID WASTES

Description	Quantity Generated	Constituent Parameter with Concentration	Method of Disposal
Used Oil (in kiloliters)	1.125	Approx. 20% water	Used Oil, Spent Catalysts and Waste Oil are sold to CPCB authorized parties only.
Spent Catalyst (in MT)	-	Total stock is a mixture of catalysts	
Waste Oil (in kiloliters)	10.000	NG Condensate	

NB: The stock of spent catalyst is a mixture of 37.7 HT, 66.4 LT, PR/SR 16.6 & Methanation catalyst of 16.4 MT containing Nickel, Silicon, Chromium, Manganese etc.

## PART "G"

### IMPACT OF POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND COST OF PRODUCTION

Operation of plants of Namrup Fertilizer Complex of BVFCL have their effect on the nature and natural resources like air and water in the following ways:

(a) Impact of emissions in atmosphere, which is negligible.

i) Natural Gas of Sulphur content only in traces is being used as fuel with excess quantity of air, so flue gas exit at the stacks of Primary Reformers, Boilers and Captive Power Plant turbines are practically free from hydrocarbons, SPM, SOX, NOX and CO.

ii) Urea Prilling Tower dust emission in Urea Plant-III and Urea Plant-II are within the limits. Therefore, the contribution of Namrup Fertilizer Complex towards ambient SPM level is insignificant.

iii) Various leakages taking place in plants occasionally (though being attended as soon as possible), ammonia concentration at some places inside the plants sometimes goes high. However, quality of ambient air outside the plants / factory is well within the allowable limit. Ambient air condition is monitored continuously in 2 Nos. fixed stations inside the factory premises and 2 Nos. stations outside the factory through Mobile Ambient Air Monitoring Van.

(b) Impact of Liquid Effluents in water:

The characteristics of some of the ingredients in the effluent generated in Namrup Fertilizer Complex are such that these have only a very marginal potential to affect the river water. Analysis of various samples of ground water had shown practically no impact on ground water. However, in case start-up and shut down of plants, fluctuation in pH and ammoniacal nitrogen contents is experienced. As per CPCB's directive, online monitoring system for liquid effluents and stack gas was successfully installed and commissioned. The data is being continuously uploaded in the designated website of CPCB.

(c) Impact of Solid wastes:

Solid Wastes generated in Namrup Fertilizer Complex are very small in quantity as natural gas is being used as raw material. Spent catalysts, discarded batteries etc. are the main solid wastes. These wastes are handled properly as a result of which there is no unwanted impact on the environment observed so far. As per relevant Hazardous Waste act, these solid wastes are sold to CPCB authorized vendors only.

Impact on Conservation of Natural Resources and on Cost of Production:

The most important natural resources used in manufacture of fertilizer in Namrup Fertilizer Complex of BVFCL are (a) Natural Gas from M/S OIL (b) Water from nearby Dilli River and (c) Atmospheric Air.

The pollution control measures as explained above ensure that the various constituents resulting in pollution both due to emissions as well as discharge of liquid effluents are kept within permissible limits after revamp. Apart from ensuring control of pollution, the measures also have resulted in tangible gains as far as conservation of natural resources is concerned. Purge gas from Ammonia synthesis in Ammonia-II and Ammonia-III are used as fuel in Primary Reformer instead of venting.

PART "H"

ADDITIONAL INVESTMENT PROJECTIONS ON ENVIRONMENTAL PROTECTION

Both the existing operating plants are likely to be permanently closed down within next 4 to 5 years and new higher capacity plant based on state-of-the-art zero discharge plant will be established at the existing location of BVFCL Namrup by the year 2021.

PART "I"

ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENT PROTECTION  
AND ABETMENT OF POLLUTION

(a) Brahmaputra Valley Fertilizer Corporation Ltd, Namrup is located amidst pristine surroundings in the Dibrugarh district of Assam consisted of three plants. All the three Plants were established under the banner of Fertilizer Corporation of India Limited and Hindustan Fertilizer Corporation Limited at different periods. The first group of plants (Namrup-I) was established in the sixties and went into commercial production in 1969. Namrup-II group of Plants were added in the seventies and went into commercial production in 1976 and was followed by Namrup-III group of plants established in the eighties which went into commercial production in 1987.

(b) Thus Plants were established at Namrup at different decades. As a consequence, the improvements in technologies are reflected in establishment of these plants - Namrup - III being the most sophisticated. Namrup-II and Namrup-III plants did not have most of the in-built pollution abatement facilities as these plants were coceived before the enactment of most of the present day pollution prevention laws/acts/norms etc. Depending on requirements from time to time as desired by Pollution Control Board, various pollution control facilities had been incorporated for Namrup - II & Namrup-III group of plants so as to meet the prescribed pollution standards. The process had continued and the pollution control measures were adopted as integral part of the renovation / revamping of the plants. In this connection it is worth noting that it is easier to incorporate in-built pollution control measures, in a new plant from design stage itself.

Signature of the Occupier

Signature



Name

Shri S D Singh

Designation

Director (Production)  
BVFCL Namrup

S.D. SINGH/ एस. डी. सिंग

DIRECTOR (PRODN.)/ निदेशक (उत्पादन)  
BVFC LTD, NAMRUP/ वि.मि.एफ.सी.एल., नामरूप