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India,
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CIN : L24129AP2006PLC076238



NFCL/ENV/CPCB/QR/03/2016

25th October 2016

To,
**The Member Convener,
Central Pollution Control Board,
South Zone Office,
NISARGA BHAVAN,
A – Block 1&2 floors,
Thimmaiah Road,
7th Cross Shivanagar (Opp. Pushpanjali Theatre)
BANGALORE – 560 010.**

Subject : Format 'FB' - Quarterly Report for July 2016 – September 2016

Reference : Your Letter No.F-03-05-01/ZOB/90-91

Sir,

With reference to your directives, the Quarterly Progress Report, in the prescribed format 'FB', for the quarter ending September 2016 is being forwarded. The relevant supporting documents are enclosed at Annexure - I and Annexure – II for your reference.

It may be noted that the plants have been designed to comply with MINAS levels and all the process plants as well as the treatment units are performing well.

Thanking you,

Yours faithfully,
For NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED

G V S Anand
Senior General Manager (Operations)

Enclosures: Annexure – I : Details of water consumption and effluent generation
Annexure – II : Details of Prill Tower Dust monitoring

Cc: Member Secretary, APPCB, Hyderabad,
Member Secretary, CPCB, Delhi

MINAS AND EMISSION STANDARDS IMPLEMENTATION IN
FERTILIZER INDUSTRIES

Quarterly Progress Report, July 2016 – September 2016

1.0 Name of the industry : *NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED*

2.0 Emissions :

2.1 Does the Industry meet the emissions standards? : *Yes*
(Give analysis report)

2.2 If not, give the deviations from the standards : *Not Applicable*

2.3 What measures were under taken or propose to be implemented by the industry to comply with the standards?

Adequate measures were taken at the design stage itself to incorporate pollution treatment systems in both Unit-I & Unit-II, such as, dedusting system provided at the top of Urea prill towers, Urea dust recovery systems in Bagging Plant, Transfer House and at bottom of the Prilling Towers, Purge gas recovery unit in Ammonia plants, Hydrolyser in Urea plants, separate flare stacks for ammoniated and non ammoniated gases, ammonia absorption improved by scrubbing with water for medium pressure off gases leaving from Urea Plants.

2.4 Progress of implementation and proposed date of completing the execution to meet the Standards.

Commercial production commenced from 1st August, 1992 from Plant-I and from 19th March, 1998 from Plant-II. Both the plants are in operation now.

3.0 Liquid Effluents

3.1 Plant wise liquid effluent sources: Flow (m³/hr) quantity and concentration of pollutants

All the offsite facilities including the Effluent Treatment Plant are common for both Plant-I and Plant-II. Please refer Annexure-I for data pertaining to average effluent quantity & quality for the quarter ending September 2016.

3.2 Does the industry meet MINAS or the Standards of the State Board? Both Standards?
(Give analysis report)

Yes, NFCL meets the standards specified by statutory bodies. Please refer Annexure-II for the Urea Dust analysis report for the quarter ending September 2016.

3.3 If not, give the deviations from the standards specified by the State Board.

Not Applicable.

3.4 What measures the industry had undertaken or proposed to be implemented to comply with the Standards?

NFCL complies with the standards specified by statutory authorities.

NFCL was awarded the ISO 14001:1996 (EMS) certification in May 2000 by M/s BVQI. It was subsequently upgraded to ISO 14001:2004 later. This system ensures the continual improvement on Environment.

As a proactive measure NFCL has implemented Process Safety Management System (PSMS) since October 2007.

NFCL is also certified with RC 14001:2008 (Responsible Care Management System) since March 2012.

In Unit II; Deep Hydrolyser Stripper, Process Condensate Stripper, Purge Gas Recovery Unit and Disc Oil Separator have been commissioned, as pollution control equipments, along with other equipment in the process plants.

As the individual effluents are treated in the respective plant, ETP is sufficient to treat the untreated effluents, if any, from both plants.

3.5 Process of implementation and proposed date of completing the work to meet the standards.

All the treatment plants have been built and commissioned along with the process plants and upgraded / improved as per the technological developments. The treatment plants are working satisfactorily.

4.0 Comments of the concerned State Board:

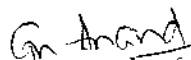
NFCL Received combined Air, Water Consents and Hazardous Wastes Authorization for Plant I, II, CDR and CFG Plant from APPCB Office, Hyderabad, on 09.12.2014. These Consents for Operation are valid up to 31.03.2017.

Consent for Air - APPCB/VSP/KKD/10300/HO/CFO/2014 – 602, dated 28-11-2014

Consent for Water - APPCB/VSP/KKD/10300/HO/CFO/2014 – 602, dated 28-11-2014

HW Auth. No. - APPCB/VSP/KKD/10300/HO/CFO/2014 – 602, dated 28-11-2014

Signature:



Name: G V S Anand

Senior General Manager (Operations)

Address: Nagarjuna Fertilizers and Chemicals Limited

Nagarjuna Road

KAKINADA- 533 003

Andhra Pradesh



STACK EMISSION:

Sampling and analysis done by: Industry/~~Consultant to industry~~/~~State Board~~/~~Central Board~~

Process/Plant	Stack/Prilling	Parameters	Date of sampling/analysis
Prilling Tower:			
Unit-I	102 Meters	Particulate matter mg/Nm ³	Refer Annexure II
Unit-II	102 Meters	Particulate matter mg/Nm ³	Refer Annexure II
Sulphuric Acid Plant			
Unit-I		(1) Sulphur Dioxide (Kg/Te 100 % H ₂ SO ₄)	Not Applicable
DCDA/SCSA		(2) Acid mist (mg/Nm ³)	Not Applicable
Unit-II		(3) Sulphur Dioxide (Kg/Te 100 % H ₂ SO ₄)	Not Applicable
DCDA/SCSA		(4) Acid mist (mg/Nm ³)	Not Applicable
Nitric Acid Plant:			
Unit-I		NO _x (Kg/Te if dilute HNO ₃)	Not Applicable
Unit-II		NO _x (Kg/Te if dilute HNO ₃)	Not Applicable
Acidulation of rock Phosphate		Total Fluoride as F(mg/Nm ³)	Not Applicable
Rock phosphate grinding		Particulate matter (mg/Nm ³)	Not Applicable
Complex (NPK) Plants:			
(a) Reaction		Particulate matter (mg/Nm ³)	Not Applicable
		Ammonia (mg/Nm ³)	Not Applicable
(b) Granulation, drying		Particulate matter (mg/Nm ³)	Not Applicable
		Ammonia (mg/Nm ³)	Not Applicable
(c) Steam Generation Plant		Particulate matter (mg/Nm ³)	Not Applicable
(d) Captive power plant		Particulate matter (mg/Nm ³)	

UREA PRILL TOWER DUST ANALYSIS (mg/Nm³)

July 2016			
Date	Plant-I	Date	Plant-II
05.07.16	15.6	05.07.16	20.1
12.07.16	19.5	12.07.16	24.3
19.07.16	20.8	19.07.16	19.7
26.07.16	21.9	26.07.16	23.9
August 2016			
Date	Plant-I	Date	Plant-II
02.08.16	16.3	02.08.16	17.5
09.08.16	18.1	09.08.16	19.2
16.08.16	17.9	16.08.16	18.6
23.08.16	22.5	23.08.16	24.1
30.08.16	23.6	30.08.16	22.7
September 2016			
Date	Plant-I	Date	Plant-II
06.09.16	17.0	06.09.16	20.5
13.09.16	20.9	13.09.16	21.6
20.09.16	16.5	20.09.16	17.7
27.09.16	18.7	27.09.16	23.4

For the Quarter, July 2016 – September 2016

Water Consumption by the Complex: 1022 m³/hr (including rain water) for both Plant-I and Plant-II

Effluents sampling and Analysis done by: Industry

Sl. No	Effluents	Quantity (Normal) m ³ /hr	pH	TDS ppm	TSS ppm	Ammonical Nitrogen as 'N' ppm	Oil ppm	TKN ppm	Conductivity µmhos/cm	Silica ppm	Phosphates ppm	Sulphates ppm	Chlorides ppm
1.	Filter back wash and raw water clarifier	0.0 *	7.9	186	45	--	--	--	--	--	--	--	--
2.	Cooling Tower blow down	56.0	7.0	2255	42	2.0	--	4.0	2617	--	6.1	355	454
3.	Boiler blow down	0.0 *	9.2	--	--	--	--	--	--	0.14	--	--	--
4.	Oily effluents	2.0	--	--	43	142	36.0 to 42.0	--	--	--	--	--	--
5.	Neutralised regeneration effluents from DM Plant & Condensate polishing unit	29.0	2.8 to 11.3	1962	35	9.1	--	18	--	--	--	--	--
6.	Floor washing and rain (NH ₃ & Urea)	9.0 **	--	--	--	--	--	--	--	--	--	--	--
7.	Sewage Treatment Plant (for Canteen effluent and Technical Building sewage) outlet [#]	7.0	7.0	--	30	--	6.1	--	--	--	--	--	--
8.	Total =	103.0											

* Modifications were carried out in the plant to recycle filter back wash from sand filters in Pre Treatment Plant to raw water reservoir. Boiler blow down is used as CT makeup and hence the effluents from both these areas are nil.

** Normally no flow. [#] Sewage Treatment Plant for our Canteen Effluent and Technical Building sewage.