



# GUJARAT STATE FERTILIZERS & CHEMICALS LIMITED

Fertilizernagar - 391 750. Vadodara, Gujarat, INDIA.

CIN : L99999GJ1962PLC001121

**By Regd. Post AD**

GSFC/SU/EC/05/18

03 May 2018

To,

The Director(S)

Ministry of Environment & Forests

Regional Office, Western Region,

"Kendra Paryavaran Bhavan",

Link Road No. 3, Ravi Shankar Nagar

BHOPAL- 462 016 (M.P.)

KA: Dr. H.V.C. Chary Guntupalli (S)

Sub.: Capacity Augmentation of existing DAP/NPK plant of M/s Gujarat State Fertilizers & Chemicals Ltd., Sikka Unit, Post: Motikhavdi, Jamnagar, Gujarat

Ref: 1. Ministry's letter no. J-11011/17/2013/-IA. II (I) dated 09.10.2014.

2. Your letter no. 5-53/2014 (ENV)/043 dated 14.01.2015.

3. Our letter No.

(i) GSFC/SU/COM.CERTI/08/17 dated 12.08.2017.

(ii) GSFC/SU/COM.CERTI/09/17 dated 26.09.2017.

(iii) GSFC/SU/COM.CERTI/01/18 dated 23.01.2018.

(iv) GSFC/SU/COM.CERTI/03/18 dated 19.03.2018.

(v) GSFC/SU/COM.CERTI/03/18 dated 27.03.2018.

Dear Sir,

This has reference to above correspondence, Please find information/documents as under:

1. Present Status (physical/civil) of work progress:

(a) The capacity augmentation project "Train D" put on hold, contract terminated on 11.04.2016 in view of total failure by LSTK Contractor M/s. HDO Ltd.

(b) However, associated facilities to support the proposed expansion include new 675 MTPH bagging facilities matching the future requirement of loading the entire railway rack, required interconnections in material handling, bagged product movement system for railway rack filling, new railway platform with shed & comprising 16000 MT filled bag storage, new 30,000 MT Silo with 675 MTPH reclaiming facility, existing silo reclaim capacity augmentation to 675 MTPH and suitable wet de dusting system have also been installed.

(c) Dredging near Sikka jetty is completed.

2. Point wise compliance status to various stipulations with supporting documents and reports for period October 2017 to March 2018: Attached as

**Annexure A-1** – for EC dated 31.07.1990 and 11.12.2001.

**Annexure A-2** – for EC dated 09.10.2014.

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**ISO 9001, ISO 14001, OHSAS 18001 & ISO 50001 Certified Company**



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Fertilizernagar - 391 750. Vadodara, Gujarat, INDIA.

CIN : L99999GJ1962PLC001121

**Annexure A-3** – for CRZ clearance dated 16.09.2014.

**Annexure A-4** – Data sheet for the monitoring report as per letter dated 14.01.2015.

- (d) Copy of Consents to Establish/Operate from GPCB : Attached as **Annexure-1**.
- (e) Details of production of last three years : Attached as **Annexure-2**.
- (f) Copies of Environment monitoring reports of last two quarters: Attached as **Annexure-3**.
- (g) Environment Clearance for DAP capacity augmentation (EC Industry): Attached as **Annexure-4**.
- (h) New Phosphoric Acid Storage Tanks at Sikka Shore Terminal (SST): Attached as **Annexure-5**.
- (i) Additional Facilities Project at Motikhavdi site: Attached as **Annexure-6**.
- (j) Environment & CRZ Clearance for dredging & other installations (EC CRZ): Attached as **Annexure-7**.
- (k) List of pollution abatement equipment for proposed expansion: Attached as **Annexure-8**.
- (l) Agreement copy of water supply with GWIL: Attached as **Annexure-9**.
- (m) Details of water recharging pond: Attached as **Annexure-10**.
- (n) Copy of peizometric well report: Attached as **Annexure-11**.
- (o) Copy of Storm water channel: Attached as **Annexure-12**.
- (p) Copy of occupational health surveillance: Attached as **Annexure-13**.
- (q) Details of Green Belt: Attached as **Annexure-14**.
- (r) Copy of Environment Statement Form V for 2017-18: Attached as **Annexure-15**.
- (s) Copy of Environmental Clearance Advertisement: Attached as **Annexure-16**.
- (t) Copy of report on Storage of Arsenic Sludge: Attached as **Annexure-17**.

A soft copy of the half yearly compliance reports is also attached.

Vide above referred letter dated 12.08.2017, 26.09.2017, 23.01.2018, 19.03.2018 & 27.03.2018 we have requested to issue certified report to us for capacity augmentation project. Copy of letter dated 12.08.2017, 26.09.2017, 23.01.2018, 19.03.2018 & 27.03.2018 is attached for your ready reference.

In view of above, you are once again kindly requested to issue the certified report to us for our capacity augmentation project and obliged.

Thanking you,

Yours faithfully,

For Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)

  
D K Gandhi

Sr. Vice President

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**REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF  
ENVIRONMENTAL CLEARANCES AND ENVIRONMENTAL MANAGEMENT**

for

J-11011/7/87-IA (Vol.III) dated 31.7.1990,

J-11011/26/2001-IA.II (I) dated 11.12.2001

**Status for EC dated 31.7.1990**

Sr. No.	Conditions	Status																				
(I).	The PA must strictly adhere to the stipulations made by SPCB and Govt. of Gujarat.	<p><b>Complied.</b> GPCB has issued consolidated consent No. AWH- 91132 dated 20.02.2018 which is valid till 13.02.2023. <b>(Annexure-I)</b> The production was found within the consented capacity of 94600 MT/Month. Production (MT) during last three years are as under: <b>(Annexure-II)</b></p> <table><tr><th>Year/ Product</th><th>2015-16</th><th>2016-17</th><th>2017-18</th></tr><tr><td><b>DAP</b></td><td>370200</td><td>411850</td><td>503830</td></tr><tr><td><b>APS</b></td><td>18180</td><td>41550</td><td>20260</td></tr><tr><td><b>NPK (12:32:16)</b></td><td>27620</td><td>15240</td><td>123490</td></tr><tr><td><b>NPK (10:26:26)</b></td><td>20030</td><td>23100</td><td>30730</td></tr></table> <p>It was submitted that all the emission limits specified have been checked in-house regularly and monitored on quarterly basis by third party as well as by an external environment auditor accredited by GPCB. Parameters as specified in the consent for AAQ have been monitored regularly and the results were found within the limits as per reports submitted. Since commissioning of the plant, there is no industrial effluent generation or discharge till date as intimated during visit. Separate sewage treatment plants for the factory as well as colony sewage have also been provided. It was noted that treated factory sewage quantity — Approx. 2100 Cu. M per month is consumed in the process there by achieving zero discharge. No solid waste has been generated in the process as per records. However, waste oils were sold to the MoEF approved recyclers. <b>(Annexure-III)</b></p>	Year/ Product	2015-16	2016-17	2017-18	<b>DAP</b>	370200	411850	503830	<b>APS</b>	18180	41550	20260	<b>NPK (12:32:16)</b>	27620	15240	123490	<b>NPK (10:26:26)</b>	20030	23100	30730
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(II).	The PA will explore the alternate source of water so that even tapping of ground water either through the existing tube/ bore wells or additional wells at the plant does not affect the local demand.	<p>Complied. Total water requirement of the company (both - industrial as well as domestic) is around 1.7 MLD. However, We have constructed check-dams as well as water harvesting recharging system for conserving the sub soil water resources. Two water-harvesting systems were already implemented. Total capacity of water recharging ponds is 100,000 M3. We have obtained the permission and have entered into the contract for supply of Narmada water and currently we have started receiving approx about 1MLD. Presently, following water conservation measures have been taken: Boiler blow down re-used in process — 20 cu.M/ day; Cooling tower</p>																				



		blow down re-used in process — 60 cu.M/day; Treated Factory sewage re-used in process — 70 cu.M/day.
(III).	The gaseous emissions from various process units should conform to the standard prescribed by the Govt. or the Central ISPCB. At no time the emission levels should go beyond the stipulated standards. In the event of failure of any Pollution Control System adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	<b>Complied.</b> As stated in Pt. No. 1, analytical reports do not show any abnormality with regard to the standards prescribed by the GPCB. It was submitted that no show cause notice has been issued in last three years by GPCB for any violation of environment norms. <b>(Annexure-III)</b>
(IV).	The entire quantity of industrial effluent generated within the process operations will have to be recycled either as process water or for afforestation in the plant premises. If any liquid effluent is coming out from any other systems, it should conform to MINAS before discharging into the sea.	<b>Complied.</b> It was noted that 1500 m3/day water is utilized in the process and practically no industrial effluent is discharged. Average 175 m3/day effluent is generated which is used in the process. The analytical data of treated sewage do not show any abnormality.
(V).	The PA should provide a fugitive emission control system particularly in packing plant.	<b>Complied.</b> . Four dust extraction units, one attached to the screen house and conveyer belts, other to the bagging plant, another two to the conveyer belts of Bentonite silo and at the backside of the Bentonite silo have been installed and operating regularly. Monitoring of fugitive emission in the packing plant and raw material storage area has been carried out for SPM and the results were found within limits. SPM has been monitored every quarterly by third party and emission ranges from 20 to 50 mcg./NM3 as against specified limit of 150 mcg./NM3. <b>(Annexure-III)</b>
(VI).	The PA must set up four air quality monitoring stations at different locations in the plant premises and in the nearby areas in consultation with SPCB and the air quality will be monitored as per the standard procedure on a weekly basis. The monitored data should be recorded and furnished to SPCB.	<b>Complied.</b> Four AAQ monitoring stations within the factory premises have been fixed up in consultation with GPCB keeping in mind the wind velocity and direction and the monitoring has been carried out for all the four stations on quarterly basis by third party monitoring agency as well as environment auditor three times in a year and the results do not show any abnormality. <b>(Annexure-III)</b>
(VII).	The liquid effluent quality will be measured on daily basis. Adequate number of effluent quality monitoring stations must be set up in consultation with SPCB. If the effluent quality exceeds the standards prescribed at any time, the corresponding units of the plant, which are	<b>Complied.</b> Average 175 m3/day effluent discharge is generated which is used in the process. Of these, 70 m3/day treated sewage effluent is generated. Quality of treated factory sewage is checked regularly and all the parameters are found within the prescribed limits. Treated sewage is recycled in the process. <b>(Annexure-III)</b>

	contributing to the excessive pollutant loads, shall be immediately stopped from the operation till the quality of pollutants discharged from the units is brought down to the required levels.																			
(VIII).	The PA should prepare a well-designed scheme for solid waste disposal generated during various process operations or in the treatment plant. The plan for disposal should be submitted to this Ministry within a period of six months.	<b>Complied.</b> As stated in Pt. No. <b>1</b> , no solid waste has ever generated from the plant. However, an authorization has been obtained from GPCB. All hazardous wastes have been disposed as per GPCB guidelines with manifest on GPCB XGN. <b>(Annexure-I)</b>																		
(IX).	No change in design of stacks should be made without the prior approval of SPCB. Alternate Pollution Control System and proper design (Steam injection system) in the stack should be provided to take care of excess emission due to failure in any system in the plant. The PA will provide proper control systems for abnormal emission during start up/shut down.	<b>Complied.</b> Various dust and gas scrubbing systems incorporating cyclones, venturi and scrubbers have been provided since design stage to take care of all the emissions from the plant even at high production levels. Moreover, to avoid excessive emission if any, during start up/ shut down of the plant, a special secondary stage tail gas scrubber system has been provided from the design stage. Accordingly, the emission level always remains below the prescribed limits. The process of putting up online ammonia emission monitors for process stacks in its present process stacks is also completed.																		
(X).	The PA should install separate sewage system for storm water, sewage and process wastewater.	<b>Complied.</b> Separate treatment facilities for treating process wastewater and factory and colony sewage have been provided. Separate storm water drainage system has also been provided since inception of the plant. Sewage treatment plant capacity for factory is 100 cuM per day.																		
(XI).	The PA must construct drains storage tanks, lagoons etc. with impervious layers. The ground water quality should be monitored in and around the project site regularly and recorded data should be furnished to SPCB quarterly.	<b>Complied.</b> All the drains, lagoons storage tanks have already been constructed with impervious layers as submitted. The ground water quality as directed above is monitored regularly and the results are being conveyed to GPCB.																		
(XII).	The PA must maintain sufficient free space in the ammonia storage tanks and the design of storage tank must conform to the stipulations made by the chief Inspector of factories.	<p><b>Complied.</b> Initial designs drawings have been approved by Chief Insp. of Factories vide their letter No. PLN/686/5387 dated 5.3.1987 for all the storage tanks at <b>plant</b> site and <b>shore terminal</b>. Details are as below:</p> <table border="1"> <thead> <tr> <th>Storage Location</th><th>Material</th><th>Storage capacity</th></tr> </thead> <tbody> <tr> <td rowspan="4">Motikhavdi</td><td>Ammonia</td><td>2 x 3000 MT</td></tr> <tr> <td>Phos. acid</td><td>2 x 5000 MT, 1 x 10000 MT</td></tr> <tr> <td>Sulf. acid</td><td>3 x 750 MT</td></tr> <tr> <td>Furnace oil</td><td>2 x 450 MT</td></tr> <tr> <td>Sikka Shore Terminal</td><td>Ammonia</td><td>2 x 10000 MT</td></tr> <tr> <td></td><td>Phos. acid</td><td>3 x 10000 MT</td></tr> </tbody> </table>	Storage Location	Material	Storage capacity	Motikhavdi	Ammonia	2 x 3000 MT	Phos. acid	2 x 5000 MT, 1 x 10000 MT	Sulf. acid	3 x 750 MT	Furnace oil	2 x 450 MT	Sikka Shore Terminal	Ammonia	2 x 10000 MT		Phos. acid	3 x 10000 MT
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(XIII).	The PA shall explore the possibility of alternate source of water and progress report should be furnished to this Ministry regularly till the final decision is taken.	Complied. We have constructed check-dams as well as water harvesting recharging system for conserving the sub soil water resources. Two water-harvesting systems were already implemented. Total capacity of water recharging ponds is 100,000 M3. An approval also has been obtained for using Narmada water, necessary contract has been made with M/s. GWIL and at present we have started receiving Narmada water approx about 1MLD.
(XIV).	The ammonia and phosphoric acid must be transported to the project site through well-designed pipeline from the on-shore storage terminal to avoid road congestion and hazards through road transportation. The storage facility should meet the stipulations made under EP Act 1986 and subsequent amendments.	<b>Complied.</b> Well designed overhead pipelines for transporting ammonia and phosphoric acid from Jetty to SST and SST to plant site have been laid. Periodical rounds and inspections of the line have been carried out in every shift on the cross country pipeline in order to ensure safety. Storage facilities have been installed in line with various stipulations. So far not a single incident had occurred since commissioning as submitted.
(XV).	The PA will not propose any further development in this area in the proposed project site without prior approval of Chief Wildlife Warden of the State. The State Government in the Department of Forests and Environment & MOEF. Govt. of India.	<b>Complied.</b> Permission of wildlife warden for the existing facilities was obtained vide No. WLP/275/32/B/871-873/2009-10 dated 5.6.2009. Regarding proposed expansion, the area of project falls outside the Eco Sensitive Zone declared vide notification No. 2561 E dated 22.8.2013. However, an approval on the map is obtained.
(XVI).	The PA must ensure that ships carrying ammonia and phosphoric acid will not clean its holds anywhere near the Marine Wildlife Reserves.	<b>Complied.</b> Adequate care has been taken to ensure that no ship is cleaned near the coastal area/ Marine reserve. It was submitted that PA regularly issues letter to the Master of each shipment not to indulge in such activity in the protected area.
(XVII).	The GSFC will provide funds along with other plants at Sikka towards the establishment of an institute for managing Marine Wildlife Reserve.	<b>Complied.</b> GSFC submitted a sum of Rs. 5 Lakhs vide letter dated 5.10.2010 together with cheque No. 505466 dated 6.10.2010 being GSFC's contribution for the establishment of Marine Research Station.
(XVIII).	The PA must carry out a studying collaboration with National Institute of Oceanography to predict adverse impact on the marine ecosystem due to existence of jetty, unloading of raw materials at jetty, disposal of waste water into the sea from the shore storage terminal/plant etc. The study should also assess the impact of liquid ammonia and phosphoric acid on the Marine eco-system,	<p><b>Complied.</b> The required study had been carried out by NIO after operation of unloading facility for about 3 years and report was submitted to the Ministry. The report concludes that over all biological characteristics is normal and supporting healthy eco-system.</p> <p>Also during recent procedure for obtaining CRZ clearance for dredging and other activities, a study on bio diversity has been carried out by M/s Anannthsree Eco-Care on behalf of M/s. Indomer Coastal Hydraulics Pvt. Ltd., Chennai which shows no harm to the existing marine life.</p>

	especially on the live corals. The report should be submitted to this Ministry within six months for review.	
(XIX).	The PA must submit a disaster management plan duly approved by nodal agency of the State Government to this Ministry within three months.	<b>Complied.</b> A comprehensive ON-SITE/OFF-SITE plan & Disaster Management Plan have been prepared. The plan is updated every two years. Latest version being of 2015.
(XX).	The PA should submit a rehabilitation plan for the quarried site and undertake or initiate reclamation programme within six months.	<b>Complied.</b> The quarried site admeasuring 3 Ha. area and 50 feet depth was fenced properly. Efforts have been made in past to grow trees. However, due to rocky & barren land strata plantation has been poorly grown. Moreover, it is observed that, the site was filled with rainwater and nearby farmers draw the water for irrigation.
(XXI).	The PA must strictly implement the anti-pollution and safety measures as envisaged in the EIA report submitted to the MOEF.	<b>Complied.</b> Adequate anti-pollution and safety measures as mentioned in EIA report have been implemented as noted from records.
(XXII).	The PA must dibble cher seeds on both sides of the Sikka jetty in 60 hectares for growing dense mangrove forests.	<b>Complied.</b> About two lakhs mangrove saplings were planted over 60 Ha on both the sides of jetty road. The plants have grown & spread due to regeneration over 100 Ha during course of time as submitted. It was observed that mangroves have developed & expanded due to natural regeneration and has become denser and wider.
(XXIII).	The PA must prepare a green belt development plan for 100 acres at the project site and submit to this Ministry within six months for review.	<b>Complied.</b> It was submitted that extensive tree plantation of species like Neem, Banyan trees, Gulmohar, Peltophorum, Kasid, Sirus, Bahunia and Glirisidia etc. has been carried out all around the industrial unit and colony area and a total of about 93.55 Acres of land is covered by green belt out of the total approx. 618 Acres of land. Orchards having medicinal plants and various fruit plants have been grown using drip irrigation and treated colony sewage and water. Three farms including mango farms and fruit farms have been developed. One ornamental plant nursery to cater the developmental needs have been also set up. Furthermore intensive tree plantation has been carried out to densify the Greenbelt by planting over 6500 more tree plants during last year and 2000 more trees will be planted in this monsoon within the existing green belt to bring up the plant density and make the tree canopy covering the maximum land areas.
(XXIV).	The PA will not propose to expand the project if the expansion involves additional movement of raw-materials / products through the jetty.	<b>Complied.</b> We abide by the condition and have obtained EC from the Ministry for proposed expansion.

(XXV).	The sea route must be demarcated at site and all shipping should be limited to the predetermined sea way only.	<b>Complied.</b> Gujarat Maritime Board has already demarcated the sea route and the ships are moved through that only as submitted. Demarcated map of sea route is submitted to CF, Jamnagar vide our letter No. QCL/FOREST/4/1/00 dated 18.11.00.
(XXVI).	Additional area under the control of the company which is not being used for the plant utilities may be afforested and funds for this purpose should be suitably provided. Tree plantation programme should be undertaken in consultation with Forests Department.	<b>Complied.</b> Trees have been grown all round the premises to fulfil the requirement as stipulated. As stated above in Condition No. 23, additional 60 acre area has been covered with trees.
(XXVII).	A separate EMC with suitably qualified people to carry out various functions related to environmental management should be set up under the control of senior technical personnel which will report direct to the head of organization.	<b>Complied.</b> All the pollution control activities at the site are looked after by a full-fledged department with qualified personnel who are working directly under the chief executive of the unit.
(XXVIII).	The PA will provide adequate financial provision) capital and recurring expenditure) along with implementation schedule for all the conditions stipulated therein. The details of fund provision should be made available to this Ministry and the funds so provided should not be diverted for any other purpose.	<b>Complied.</b> It was submitted that expense of Rs. 0.32876 Cr. is incurred for environmental safeguards during the period October 2017 to March 2018.
(XXIX).	The PA must set up a laboratory facility for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the Chief Executive.	<b>Complied.</b> A full-fledged laboratory facility housing various precise imported and indigenous instruments like, spectrophotometers, Atomic Absorption spectrophotometer, Dragger pump, PM2.5 and PM10 Air samplers, Stack monitoring kits, Orsat apparatus, BOD incubator, COD digestion apparatus, pH meter, conductivity bridge weighing balances etc. has been setup. Real time monitoring for ammonia in process stacks as well as photographs of ZLD compliance have also been complied. Qualified personnel have been employed and HOD directly reports to the Chief Executive of the unit.
(XXX).	The Ministry of any other competent authority may stipulate any further condition after reviewing the impact assessment report or any other reports prepared by the project authority.	<b>Agreed to Comply.</b> Agreed to abide by the condition.
(XXXI).	The Ministry may revoke clearance if	<b>Agreed to Comply.</b> Agreed to abide by the condition.



	implementation of the stipulated conditions is not satisfactory.	
(XXXII).	The above conditions will be enforced inter-alia under the Water Act, 1974, the Air Act 1981 and the EP Act 1986 along with their amendments.	<b>Complied.</b> The production was found within the limits as per details submitted. The regular monitoring of air and water quality has been carried out as per the prescribed norms and reports were submitted regularly to the Ministry. It was noticed that monitoring mechanism was satisfactory as per records submitted.

## Status for EC dated 11.12.2001

Sr. No.	Conditions	Status																				
1.	All the conditions and safeguards stipulated by the Ministry in its original clearance letter of 31st July, 1990 must be strictly adhered to.	<b>Complied.</b> It is evident from above mentioned status that all the conditions have been complied.																				
2.	No further capacity expansion may be undertaken without prior approval of this Ministry.	<b>Agreed to Comply.</b> Agreed to abide by the condition.																				
3.	The environmental management and risk mitigation measures envisaged in the REIRA report submitted by the company must be incorporated in the project implementation and operational phases.	<b>Complied.</b> A comprehensive ON-SITE/OFF-SITE plan & Disaster Management Plan have been prepared. The plan is updated every two years. Safety mock drills & inspection of pipelines have been carried out regularly.																				
4.	The conditions stipulated by GPCB should be strictly followed.	<b>Complied.</b> GPCB has issued consolidated consent No. AWH - 91132 dated 20.02.2018 which is valid till 13.02.2023. <b>(Annexure-I)</b> The production was found within the consented capacity of 94600 MT/Month. Production (MT) during last three years are as under: <b>(Annexure-II)</b> <table><tr><th>Year/ Product</th><th>2015-16</th><th>2016-17</th><th>2017-18</th></tr><tr><td><b>DAP</b></td><td>370200</td><td>411850</td><td>503830</td></tr><tr><td><b>APS</b></td><td>18180</td><td>41550</td><td>20260</td></tr><tr><td><b>NPK (12:32:16)</b></td><td>27620</td><td>15240</td><td>123490</td></tr><tr><td><b>NPK (10:26:26)</b></td><td>20030</td><td>23100</td><td>30730</td></tr></table> <p>It was submitted that all the emission limits specified have been checked in-house regularly and monitored on quarterly basis by third party as well as by an external environment auditor accredited by GPCB. Parameters as specified in the consent for AAQ have been monitored regularly and the results were found within the limits as per reports submitted. Since commissioning of the plant, there is no industrial effluent generation or discharge till date as intimated during visit. Separate sewage treatment plants for the factory as well as colony sewage have also been provided. It was noted that treated factory sewage quantity — Approx. 2100 Cu. M per month is consumed in the process there by achieving zero discharge. No solid waste has been generated in the process as per records. However, waste oils were sold to the MoEF approved recyclers. <b>(Annexure-III)</b></p>	Year/ Product	2015-16	2016-17	2017-18	<b>DAP</b>	370200	411850	503830	<b>APS</b>	18180	41550	20260	<b>NPK (12:32:16)</b>	27620	15240	123490	<b>NPK (10:26:26)</b>	20030	23100	30730
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5.	Company must obtain prior approval of Chief Wildlife Warden before commissioning the project.	<b>Complied.</b> Permission of wildlife warden for the existing facilities was obtained vide No. WLP/275/32/B/871-873/2009-10 dated 5.6.2009. Regarding proposed expansion, the area of project falls outside the Eco Sensitive Zone declared vide Notification No. 2561 E dated 22.8.2013.																				

**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENTAL  
CLEARANCE AND ENVIRONMENTAL MANAGEMENT  
F. No. J-11011/17/2013/IA.III (I) dated 09.10.2014**

Sr. No.	Conditions	Compliance as on 31.03.2018										
Status for EC (Industry) as on 31.03.2018												
1	This has reference to your letter dated 31st January, 2014 along with project documents including form I, terms of reference, pre-feasibility report, EIA/EMP report and subsequent submission of additional information vide letters dated 13th February, 2014, 21st March, 2014 and 20th May 2014 regarding above mentioned project MoEF & CC vide letter no. 11-90/2012-IA. III dated 16th September, 2014 has granted CRZ clearance for dredging in front of existing captive jetty near turning circle, laying of additional pipeline and addition of Ammonia and Phosphoric acid tanks in the existing Sikka shore terminal of Gulf of Kutch, Gujarat.	---										
2	<p>The Ministry of environment and Forests has examined the application. It is noted that proposal is for capacity augmentation of existing DAP/NPK Plant of M/s Gujarat State Fertilizers &amp; Chemicals Ltd, Sikka Unit, Post Motikhavdi, Jamnagar, Gujarat Total plot area 104000 m2. The marine national park is located at a distance of 7 km from the project site Total plot area is 235.2 ha of which greenbelt will be developed in 33.86 ha. Project cost is. Rs. 900 crores. The environmental clearance for the DAP/NPK plant, A, B trains and DAP/NPK plant C trains was obtained from MOEF on 31.7.1990 and 11.12:2001 respectively. Marine National Park (Gulf of Kutch) is located at a distance of 7 Km copy of letter no. WLP132/B/1041-42 of 2014-15 dated 6th May, 2014 issued by Principal Chief Conservator of Forests, Wildlife, Gujarat State, Gandhinagar has been submitted; wherein it is mentioned that the required area is not a part of Marine Sanctuary and Marine National park and is also Outside of Eco-sensitive Zone of MNP and Marine Sanctuary, Following are the details of the existing and proposed products details.</p> <p style="text-align: right;">(unit: mmtpa)</p> <table><tr><th>Sr. No.</th><th>Product details</th><th>Existing Cap.</th><th>Proposed Cap.</th><th>Total Cap.</th></tr><tr><td>1</td><td>DAP/NPK</td><td>9.846</td><td>5.4</td><td>15.246</td></tr></table>	Sr. No.	Product details	Existing Cap.	Proposed Cap.	Total Cap.	1	DAP/NPK	9.846	5.4	15.246	<p>EC for the expansion of DAP capacity augmentation has been obtained with appropriate conditions stipulated. In point no. 2 of EC, a corrigendum is made in 30th REAC meeting held on 22-23 December 2014. Accordingly following is the corrigendum.</p> <p><b>Amendment-1:</b></p> <p>GSFC can construct ammonia tanks as per TOR, but after installation of new ammonia tanks, the total storage capacity of ammonia will be 56000 MT and GSFC will not store ammonia more than 46000 MT in a distributed manner. It means that GSFC will not store ammonia more than 82 % of the tank capacity at any point of time. <b>(Ann-IV).</b></p>
Sr. No.	Product details	Existing Cap.	Proposed Cap.	Total Cap.								
1	DAP/NPK	9.846	5.4	15.246								

	<p>Associated facilities (Isolated storage details)</p> <ol style="list-style-type: none"> <li>1. Installation of three phosphoric acid and two ammonia tanks of 10000 MT capacity at Sikka shore terminal.</li> <li>2. Installation of one ammonia tank and one phosphoric acid tanks of 10000 MT capacity within the plant premises.</li> <li>3. Laying of ammonia and phosphoric acid pipeline on existing structure from Sikka shore terminal to plant site.</li> </ol> <p>There are 2 storage tanks of 3000 MT in the plant and decided that there would be 2 storage tanks of 10000 MT capacity and storage at any time will not exceed 16000 MT of a total capacity of 26,000 MT. Transportation of liquid raw material (ammonia &amp; Phosphoric acid) by overhead pipeline from Jetty to Sikka Shore Terminal and Sikka Shore Terminal to plant site. Transportation of sulphuric acid and furnace oil will be by road tankers. Finish product will be transported by truck and rail wagon.</p>	<p>As per receipt and conditions laid down in Environmental Clearance F. No. J-11011/17/2013/IA.III (I) dated 09.10.2014, GSFC has constructed two New Phosphoric Acid tanks at Sikka Shore Terminal (SST) having capacities 10000 MT each. <b>(SST Map is attached-Ann-V).</b></p>
3	<p>Bag filter with extraction system will be provided at raw material handling area. Scrubber system will be installed at product bagging area. Venturi scrubber and cyclone will be provided in the process plant. Fresh water requirement from ground water source will be increased from 1500 m3/day to 2160 m3/day after expansion. Effluent generated will be treated in the Effluent Treatment Plant and treated effluent will be recycled/ reused in the process. No effluent will be discharged outside the plant premises and 'Zero' effluent discharge concept will be followed. ETP sludge will be sent to Treatment Storage Disposal Facility (TSDF) for hazardous waste. Spent catalysts and used oil will be sold to authorized re-processors/recyclers.</p>	<p>As per receipt and conditions laid down in Environmental Clearance F. No. J-11011/17/2013/IA.III (I) dated 09.10.2014, GSFC has constructed New Bagging plants namely A, B &amp; C at Motikhavdi site (MK) along with New Product Handling Silo equipped with De-dusting units having Venturi Scrubbers for dust extraction. Also, effluent generated is recycled back into process. <b>(MK Map is attached-Ann-VI).</b></p>
4	<p>Public hearings/public consultation was held on 17th January, 2014.</p>	---
5	<p>All the Fertilizer Plant are listed at S.N. 5(a) under Category 'A' and appraised at the Central level.</p>	---
6	<p>The proposal was considered by the Expert Appraisal Committee (Industry) in its 6th, 18th and 20th meetings held during 5-7th March, 2013, 28-30th April, 2014 and 23rd-24th June, 2014 respectively. The Committee recommended the proposal for environmental clearance. Project proponent and the EIA Consultant namely Bhagavathi Ana Labs Ltd., have presented EIA/ EMP report as per the TOR. EAC has found the EIA/EMP report and additional information to be satisfactory and in till consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.</p>	---
7	<p>Based on the information submitted by the project proponent,</p>	

<p>the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:</p> <p>A. Specific Conditions:</p> <ul style="list-style-type: none"> <li>i. All the conditions stipulated in environmental clearance letter dated 31st July, 1990 and letter no. J-11011/26/2001-IA (II) dated 11.12.2001 accorded for the existing projects shall be implemented.</li> <li>ii. All the conditions stipulated in CRZ clearance letter no. 11-90/2012/IA. III dated 16.09.2014 shall be implemented.</li> <li>iii. The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub>, HC, F) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/GPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of a pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.</li> <li>iv. Ammonia bearing fumes from the reactor and granulator of the Complex Fertilizer shall be scrubbed. Scrubbing shall have interlocking system with main plant. Cyclone followed, by bag filter shall be provided followed, to raw material handling area. Venturi scrubber and cyclone shall be provided in the process plant.</li> <li>v. Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, Ammonia, Ozone, Fluoride and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal Office of CPCB and the Gujarat Pollution Control Board (GPCB).</li> <li>vi. In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided.</li> </ul>	<ul style="list-style-type: none"> <li>i. Complied. All the conditions stipulated are complied and status is regularly informed to all concerned agencies.</li> <li>ii. Agreed. Status report is submitted along with. <b>(Ann-VII)</b>.</li> <li>iii. Monitoring reports are attached along with tabular data of all stacks/ambient air quality locations being monitored in last two quarters. <b>(Ann-III)</b>.</li> <li>iv. DAP/NPK D-TRAIN: Contract terminated on 11/04/2016 in view of total failure by LSTK Contractor M/s. HDO Limited &amp; list of abatement equipment for proposed capacity augmentation is attached. <b>(Ann-VIII)</b>.</li> <li>v. Monitoring reports are attached along with tabular data of all stacks/ambient air quality locations being monitored in last two quarters. <b>(Ann-III)</b>.</li> <li>vi. GSFC has constructed New Bagging plants namely A, B &amp; C at plant site (MK) along with New Product Handling Silo</li> </ul>
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	<p>Fugitive emissions shall be controlled by providing closed storage, closed handling &amp; conveyance of chemicals/materials, multi-cyclone separator and water sprinkling system. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions should conform to the limits stipulated by the GPCB.</p>	<p>equipped with De-dusting units having Venturi Scrubbers for dust extraction. Regular monitoring of De-dusting stacks is also carried out.</p>
vii.	<p>The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</p>	<p>vii. Agreed. New D.G Set having capacity 250 KVA is installed for New Bagging plants and stack height of 10 meter is installed as per CPCB guidelines.</p>
viii.	<p>Total fresh water requirement from Gujarat Water Infrastructure Ltd/Ground water source shall not exceed 2160 m3/day. Permission from Central Ground Water Authority/State Ground Water Authority may be obtained and submitted to the Ministry's Regional Office at Bhopal. PP shall construct additional rain water recharge pond with capacity of 15,000 m3.</p>	<p>viii. Complied. Agreement copy with GWIL is attached. <b>(Ann-IX)</b>.</p>
ix.	<p>Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. As proposed, Check dams with water storage capacity 3780 M3 and 4500 m3 respectively shall be created near plant premises.</p>	<p>ix. Details of water recharging pond is attached. <b>(Ann-X)</b>.</p>
x.	<p>As proposed, industrial effluent shall be treated in effluent treatment plant (ETP) and recycled back in the process. Sewage shall be treated in STP and treated water shall be recycled/ reused within factory premises.</p>	<p>x. Agreed. Effluent generated is recycled back into process.</p>
xi.	<p>All the effluents after treatment shall be routed to a properly lined guard pond for equalization and final control. In the guard pond, automatic monitoring system for flow and relevant pollutants (i.e. pH, ammonical nitrogen, nitrate nitrogen, Fluoride etc) shall be provided with high level alarm system.</p>	<p>xi. Agreed. All the effluents after treatment is routed to a properly lined guard pond for equalization and final control. For New bagging plants effluent quantity measurement procurement of flow meter is already initiated through our Instrument Dept.</p>
xii.	<p>Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</p>	<p>xii. Agreed. Separate storm water channel is provided.</p>



<p>xiii. Regular monitoring of ground water by installing peizometric wells around the guard pond shall be periodically monitored and report shall be submitted to the concerned Regional Office of the Ministry, CPCB and SPCB.</p> <p>xiv. The company shall construct the garland drain all around the project site to prevent runoff of any chemicals containing waste into the nearby water bodies. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.</p> <p>xv. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.</p> <p>xvi. Spent catalysts and used oil shall be sold to authorized recyclers/re-processors only.</p> <p>xvii. The process of dredging should not cause any additional sediment load on coral and mangrove area in Gulf of Kutch water flow and mud. A Committee to be constituted as proposed by Wildlife Gujarat State and report to them after dredging.</p> <p>xviii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.</p> <p>xix. Remote operated valve placed on NH3 line to avoid leakage/equipment check shall be performed to ensure that remote operated valve (ROV) is all time is functional.</p> <p>xx. All the commitments made to the public during Public Hearing/public consultation meeting held on 17th January, 2014 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p>	<p>xiii. Agreed. Peizometric well monitoring report is attached of last quarter. <b>(Ann-XI)</b>.</p> <p>xiv. Agreed. Garland drain all around the project site have been provided to prevent runoff of any chemicals containing waste into the nearby water bodies. <b>(Ann-XII)</b>.</p> <p>xv. GSFC (SU) has obtained GPCB authorization for collection, storage &amp; disposal of hazardous waste. (Attached as <b>(GPCB CC&amp;A copy is attached- Ann-I)</b>).</p> <p>xvi. Agreed. Any hazardous chemicals, catalysts or used oil will be sold to authorized recyclers/re-processors.</p> <p>xvii. Agreed.</p> <p>xviii. We already comply rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.</p> <p>xix. Agreed. Proper care will be taken to ensure functioning of ROV.</p> <p>xx. Agreed. We ensure that the commitments made during public hearing will be implemented.</p>
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<p>xxi. At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.</p> <p>xxii. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).</p> <p>xxiii. 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 OISD 117 norms.</p> <p>xxiv. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</p> <p>xxv. A comprehensive Green belt development plan shall be developed in at least 33 % area in and around the plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.</p> <p>xxvi. Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking Water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.</p> <p><b>B. General Conditions:</b></p> <p>i. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.</p>	<p>xxi. Agreed. GSFC (Sikka Unit) has already spent Rs. 1563733.00 from April 2017 to September 2017 &amp; Rs. 2449156.00 from October 2017 to March 2018.</p> <p>xxii. Agreed.</p> <p>xxiii. Agreed. Fire fighting system will be as per OISD 117 norms.</p> <p>xxiv. Agreed. PME copy sheet is attached. <b>(Ann-XIII)</b>.</p> <p>xxv. Agreed. Copy of existing Green Belt is attached. <b>(Ann-XIV)</b>.</p> <p>xxvi. Agreed. Necessary infrastructure &amp; facilities is provided to the contractor.</p> <p>i. Agreed.</p>
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<p>ii. No further expansion or modifications in -the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 to assess the adequacy of conditions imposed and to add additional environmental protection measures .required, if any.</p> <p>iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the Gujarat Pollution Control Board (GPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.</p> <p>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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).</p> <p>v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.</p> <p>vi. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.</p> <p>vii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.</p> <p>viii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.</p>	<p>ii. Agreed.</p> <p>iii. Present location of ambient air quality monitoring stations is decided by the GPCB.</p> <p>iv. Noise monitoring reports are attached. <b>(Ann-III).</b></p> <p>v. Agreed. Efforts are being made to conserve fresh water.</p> <p>vi. Agreed. Proper care will be taken to avoid mixing of accidental spillages with storm water.</p> <p>vii. Agreed. PPE's are provided by our Safety Dept.</p> <p>viii. Agreed. Regular training sessions are imparted to employees &amp; labour contracts.</p>
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<p>ix. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.</p> <p>x. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.</p> <p>xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.</p> <p>xii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set-up to carry out the Environmental Management and Monitoring functions.</p> <p>xiii. The company shall earmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests 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.</p> <p>xiv. A copy of the clearance letter shall, be sent by the project proponent to Concerned Panchayat, Zilaparisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.</p> <p>xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Gujarat Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on</p>	<p>ix. Agreed. Recommendations made are being implemented.</p> <p>x. Agreed. GSFC (Sikka Unit) has already spent Rs. 1563733.00 from April 2017 to September 2017 &amp; Rs. 2449156.00 from October 2017 to March 2018.</p> <p>xi. Agreed. CSR activities are carried out at regular intervals.</p> <p>xii. Agreed. At present also, a separate Environment Management Cell equipped with full fledged laboratory facilities is set-up and being carried out the Environmental Management and Monitoring functions.</p> <p>xiii. Agreed. List of abatement equipment for proposed capacity augmentation is already attached. <b>(Ann-VIII).</b></p> <p>xiv. Agreed. A copy of Environment Clearance letter is sent to concerned agency from whom suggestions/ representations were received.</p> <p>xv. Agreed. GSFC (SU) is regularly submitting six monthly reports on the status of the stipulated EC conditions to MoEF, Bhopal.</p>
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	<p>the website of the company.</p> <p>xvi. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the Gujarat 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 Bhopal Regional Offices of MoEF by e-mail.</p> <p>xvii. 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 at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated- in the region of which one shall be in-the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.</p> <p>xviii. 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.</p>	<p>xvi. Complied. <b>(Ann-XV)</b>.</p> <p>xvii. Complied. Advertisement copy is attached. <b>(Ann-XVI)</b>.</p> <p>xviii. Agreed. Bhoomi puja is performed on 28.01.2015 by our Chairman and Managing Director, Dr. SK Nanda, IAS.</p>
8	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
9	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted
10	The above conditions be enforced, inter-alia under the provisions of the Water (Prevention & control of pollution) Act, 1974; Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans boundary movement) 2008 and the Public Liability Insurance Act 1991 along with their amendments and rules:	Noted

**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENTAL  
CLEARANCE AND ENVIRONMENTAL MANAGEMENT  
F. No. 11-90/2012-IA.III dated 16.09.2014**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance as on 31.03.2018</b>
2	<p>It is inter-alia noted that the proposal involves dredging in front of existing captive jetty near turning circle, laying of additional pipeline, and addition of Ammonia and Phosphoric Acid tanks in the existing Sikka Shore Terminal of Gulf Kachchh, Gujarat. The jetty is located inside Sikka Creek about 3 nautical miles from the anchorage area at Latitude: 22° 27' 30" N and Longitude: 69° 47' 45" E. Being a tidal port, the berthing and de-berthing at existing jetty is done only during high tide. There is no night navigation facility. The jetty is being used for handling the import of raw materials needed for DAP production at Sikka. The draft allowable is 8m. For the import of raw materials required in keeping with the proposed expansion of fertilizers production, it is required to dredge berthing area up to -11.70m to allow vessels up to 33,000DWT to berth. It is also required to create turning circle of 400m diameter with -8.00 m bed levels for safe manoeuvring of the vessels. The proposal includes (i) dredging in berthing area and turning circle near the existing captive jetty to the tune of 2.5 lakh Cum. (ii) laying of part of Ammonia (6 inch dia. LTCS line with cold PUFF insulation) and phosphoric acid (6 inch SS 316 L) pipelines from Sikka Shore Terminal (SST) to Motikhavdi plant site located approximately 9.5 km distance and (iii) Installation of additional Ammonia and phosphoric acid storage tanks, two 10,000 MT Ammonia Tanks and three 10,000 MT Phosphoric Acid Tanks in the existing premises of SST.</p>	----
3	<p>The project was examined by the EAC in its 119<sup>th</sup> meeting held on 20th-21st December, 2012 and finalized ToR including conduct of Public Hearing. Public Hearing conducted on 17.01.2014 at Sikka. The major issues raised during the Public Hearing were employment, transportation facility for school children maintenance of existing pipeline corridor, dredging near MNP etc. PP informed that the Notification on Eco- Sensitive Zone around MNP &amp; Sanctuary was made on 22.08.2013. The project is outside the ESZ, however the CCF, MNP, Jamnagar vide letter dated 29.01.2014 has stipulated certain conditions.</p>	----



4	The project was considered by the EAC in its 132nd meeting held in March, 2014 and the EAC noted that CRZ map does not show the details of the MNP &, Sanctuary and location of dredge material dumping. Therefore the EAC suggested to the PP to submit the revised CRZ map showing all the proposed components, MNP & Sanctuary with their boundary, dredge location, dredge material disposal etc. The EAC also wanted a more positive and reassuring response on Public Hearing issues like protection of bus facility for school children and disposal of arsenic etc.	----
5	The Gujarat State Coastal Zone Management Authority has recommended the project vide letter No. ENV-10-2013-93-E dated 21.02.2014.	----
6	The details presented by the Project Proponent were examined by the EAC in its 134th meeting held on 19th - 21st May, 2014. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accords necessary Environmental and CRZ Clearance for the above project as per the provisions of Environmental Impact Assessment Notification-2006 and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:	----
7	<b>Specific Conditions:</b>	
	i. Dedicated ambulance facility with notified contact details, shall be provided as committed.	i. Complied. Ambulance is available 24x7 round the clock as per recommendation made during public hearing.
	ii. Project Proponent (PP) shall explore the possibilities for disposal of Arsenic waste in accordance with the norms and till the disposal; PP shall submit the details of storage/monitoring reports to Gujarat Pollution Control Board (GPCB) for its monitoring.	ii. Agreed. As per GPCB directive, we are maintaining records of Storage of Arsenic Sludge at GSFC Sikka Unit. <b>(Ann-XVI)</b> .
	iii. All the conditions stipulated by Gujarat State Coastal Zone Management Authority vide their letter No. ENV-10-2013-93-E dated 21.02.2014 shall be strictly complied with.	iii. Agreed.
	iv. The smooth and safe operation of the system shall be ensured by incorporating a computerized SCADA (Supervisory Control and Data Automation) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.	iv. Noted.
	v. The approach channel shall be properly demarcated with	v. Agreed. Approach channel already has buoys for safe

	lighted buoys for safe navigation and adequate traffic control guidelines shall be framed. The fishermen shall be suitably educated and informed about the traffic guidelines.	navigation.
	vi. Oil Contingency Management Plan shall be put in place.	vi. Ours being a fertilizer manufacturing company, no oil handling is carried out at jetty. Hence not applicable.
	vii. Necessary signage's shall be installed in both English and local languages wherever the pipeline is passing.	vii. Agreed. Signage's already installed throughout the pipeline.
	viii. Soil and water samples shall be regularly monitored along the pipeline route to check the leakage/contamination, if any and shall examine if any strengthening is required.	viii. Agreed.
	ix. All the recommendation of the EIA/EMP and DMP shall be strictly complied with.	ix. Agreed.
	x. The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	x. Agreed. A separate environmental management cell already exists.
	xi. The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.	xi. Agreed. Existing Green Belt details are attached. <b>(Ann-XIV).</b>
	xii. The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	xii. Agreed.
8	<b>General Conditions:</b>	
	i. The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification, 2011 and the approved Coastal Zone Management Plan of Gujarat.	i. Agreed. The construction of the structures will be as per approval of the concerned authority.
	ii. In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment, Forests & Climate Change.	ii. Noted.
	iii. This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	iii. Noted.
	iv. This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which	iv. Noted.

	shall be complied with.	
	v. Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and Gujarat State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	v. Agreed.
9	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000 including the amendments and rules made thereafter.	Agreed.
10	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Agreed.
11	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental & CRZ Clearance and copies of clearance letters are available with the Gujarat State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.	Complied. Advertisement copy is attached. <b>(Ann-XVI)</b> .
12	This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Agreed.
13	Any appeal against this 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.	Agreed.
14	A copy of the clearance letter shall be sent by the 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	Agreed. A copy of Environment Clearance letter is sent to concerned agency from whom suggestions/ representations were received.

	processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	
15	The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF & CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Agreed.
16	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB and the SPCB.	Agreed. GSFC (SU) is regularly submitting six monthly reports on the status of the stipulated EC conditions to MoEF, Bhopal.
17	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	Agreed. Copy of Form-V is attached. <b>(Ann-XV).</b>

Monitoring the Implementation of Environmental Safeguards  
Ministry of Environment & Forest  
Western Region, Regional Office, Bhopal  
MONITORING REPORT  
Part-I  
DATA SHEET

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1. Project type: River-valley/Mining/Industry/ : Industry  
Thermal/Nuclear/Other (Specify)
2. Name of the project : Capacity augmentation of existing DAP/NPK  
plant of M/s Gujarat State Fertilizers & Chemicals Ltd., Sikka unit, Post: Motikhavdi,  
Dist: Jamnagar, State: Gujarat
3. Clearance letter(s)/OM No. and date : J-11011/7/87/ IA (Vol. III) dated 31.07.1990  
J-11011/26/2001-IA.II (I) dated 11.12.2001  
J-11011/17/2013-IA.II (I) dated 09.10.2014
4. Location :
  - a. District(s) : Jamnagar
  - b. State(s) : Gujarat
  - c. Location Latitude/Longitude : - Main plant:  
22° 23'19.04"N/ 69° 51' 32.95"E;  
22° 23'21.58"N/ 69° 51' 37.04"E;  
22° 23'12.36"N/ 69° 51' 42.92"E;  
22° 23'08.49"N/ 69° 51' 38.40"E;  
Rly siding  
22° 23'45.53"N/ 69° 51' 30.79"E;  
22° 23'45.63"N/ 69° 51' 33.85"E;  
22° 23'24.64"N/ 69° 51' 41.56"E;  
22° 23'23.72"N/ 69° 51' 39.70"E;  
- Sikka Shore Terminal:  
22° 26'36.64"N/69° 50'01.05"E  
22° 26'36.21"N/69° 50'07.69"E  
22° 26'45.20"N/69° 50'01.78"E  
22° 26'44.74"N/69° 50'08.42"E  
- Pipelines from SST to Main plant:  
22° 26'43.07"N/69° 50'11.44"E  
22° 26'30.82"N/69° 50'45.68"E  
22° 25'40.44"N/69° 51'1.58"E  
22° 25'21.58"N/69° 51'4.49"E  
22° 24'58.86"N/69° 51'5.70"E  
22° 23'44.70"N/69° 51'33.73"E  
22° 23'31.94"N/69° 51'18.17"E
5. Address for correspondence
  - a. Address of the concerned : Shri B B Bhayani,  
Sr. V.P. (Project-Execution, MSD, VIG, S&FS),  
Gujarat State Fertilisers & Chemicals Ltd.  
Post: Fertilizernagar, Dist: Vadodara,  
State: Gujarat Pin: 391 750
  - Project Chief Engineer (with Pin code  
& telephone/telex/fax numbers)

	Phone: 0265-3093518 Mobile: 9979853410 Fax no.: 0265-2240966
b. Address of the Executive Project Engineer/Manager (with Pin code & telephone/telex/fax numbers)	: Shri AH PATEL, PROJ. EXE. MANAGER Gujarat State Fertilisers & Chemicals Ltd. Post: Fertilizernagar, Dist: Vadodara State: Gujarat Pin: 391 750 Phone: 0288-3019411 Mobile: 9909965817 Fax no.: 0288-2344034
6. Salient features	
a. Of the project	: 1. To cater the increasing demand of various complex fertilizers in India
	2. Employment & society upliftment
	3. Agriculture Growth
b. Of the Environmental management Plans	: 1. On-line monitoring of gaseous emission 2. No solid waste generation from process 3. Zero % liquid effluent discharge 4. No hazardous waste generation
7. Breakup of the project area	
a. Submergence area: forest & non-forest	: NA
b. Others	: ~103 ha. plant area
8. Breakup of the project affected population	: NA as the project comes within the existing plant area
With enumeration of those losing houses/ dwelling units only agricultural land only Both dwelling units & agricultural land Landless labourers/artisans	
a. SC, ST/Adivasi	
b. Others	
(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey)	
9. Financial details	: Project cost for existing capacity augmentation
Project cost as originally planned and subsequent revised estimates and the year of price reference	Originally planned: Rs. 900.00 crores Year of price reference: 2012 Revised Estimate: (AF + DAP): 748 Crores (PA STORAGE): 17 Crores
a. Allocation made for environmental management plans with item wise and year wise break-up	: Cap. cost for PC equipment is 9.70 Rs. Cr. Recurring cost of EMP will be about 1.45 Cr.
b. Benefit cost ratio/internal rate of return and the year of assessment	: Product IRR DAP 18.79% NPK-10-26-26 6.29% NPK-12-32-16 14.75%



- c. Whether (c) includes the cost of environmental management as shown in the above : Yes
- d. Actual expenditure incurred on the project so far :
- |                                 |                    |
|---------------------------------|--------------------|
| 1. DAP/NPK D-TRAIN PROJECT:     | ~Rs. 45 Crores     |
| 2. ADDITIONAL FACILITY PROJECT: | ~Rs. 364.50 Crores |
| 3. PA STORAGE TANKS AT SST:     | ~Rs. 16.50 Crores  |
| TOTAL:                          | ~Rs. 426.00 Crores |
- e. Actual expenditure incurred on the environmental management plans so far : ~Rs. 9.70 Crores
10. Forest land requirement
- a. The status of approval for diversion of forest land for non-forest use : NA.
- b. The status of clearing felling : -
- c. The status of compensatory afforestation, if any : -
- d. Comments on viability & sustainability of compensatory afforestation program in the light of actual field experience so far : -
11. The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads.), if any with quantitative information required. : NA
12. Status of construction (Actual &/or planned):
- |                                 |   |           |                    |
|---------------------------------|---|-----------|--------------------|
| a. Date of commencement         | : | PLANNED   | ACTUAL             |
| 1. DAP/NPK D-TRAIN PROJECT:     |   | JAN-2013  | N/A                |
| 2. ADDITIONAL FACILITY PROJECT: |   | JAN-2014  | MAY-2014           |
| 3. PA STORAGE TANKS AT SST:     |   | JAN-2016  | MAR-2016           |
| b. Date of completion           | : |           |                    |
| 1. DAP/NPK D-TRAIN PROJECT:     |   | SEPT-2016 | PROJECT TERMINATED |
| 2. ADDITIONAL FACILITY PROJECT: |   | NOV-2016  | SEPT-2017          |
| 3. PA STORAGE TANKS AT SST:     |   | JAN-2017  | MAR-2017           |
13. Reason for the delay/the project is yet to start:
1. Late receipt of EC & Extremely poor performance by M/s. HDO, LSTK Contractor for DAP/NPK D-Train Job, which has forced to terminate contract with M/s. HDO.
  2. Very slow progress of Main Civil & Structural Contractor M/s. SIMPLEX for Additional Facility Project, affecting front availability for all other working agencies.

Signature of the Project in charge



# GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar 382 010

Phone : (079) 23222425

(079) 23232152

Fax : (079) 23232156

Website : [www.gpcb.gov.in](http://www.gpcb.gov.in)

BY R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 3(e) & 5(5) of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules'2008 framed under the Environment (Protection) Act-1986.

And whereas Board has received consolidated consent application inward No 130986 dated 15/12/2017 for the Renewal of Consolidated Consent and Authorization (CC & A) of this Board under the provisions/rules of the aforesaid acts. Consents & Authorization are hereby granted as under:

## CONSENTS AND AUTHORISATION:

(Under the provisions /rules of the aforesaid environmental acts)

M/S. GSFC SIKKA UNIT LTD (16971)

PLOT NO.S.NO-1 & 167/2,

PO-MOTIKAVDI, KHAMBHALIYA,

MOTIKHAVDI-3611140,

TAL: DIST: JAMNAGAR.

4.1. Consent Order No.:AWH-91132 date of Issue: 20/02/2018

4.2. The consents shall be valid up to 13/02/2023 for use of outlet for the discharge of trade effluent & emission due to operation of industrial plant for manufacture of the following items/products:

Sr. No.	Product	Total quantity
1	DAP/APS/NPK	94600 MT/Month

## SPECIFIC CONDITION:-

- Industry shall obtain prior permission from CGWA within 3 months.

## 4.3. CONDITIONS UNDER WATER ACT 1974:

- There shall be no generation of industrial effluent from the manufacturing process and other ancillary industrial operations.
- The quantity of sewage effluent from the factory shall not exceed nil.
- The quantity of the domestic waste water (sewage) shall be treated in sewage treatment plant and shall be used in process whereas during plant shutdown sewage shall be treated along with industrial effluent or it shall be treated separately to conform to the following standards and shall be discharged on land for plantation gardening within the factory premises. The quantity of effluent shall not exceed 2170 KLPD.

PARAMETERS	GPCB NORMS
PH	6.5 TO 9.0
BOD	<30 mg/l
Total dissolved Solids	<100 mg/l
FC	<1000 MPN/100ml

- The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30<sup>th</sup> September every year.
- The Board reserves the right to review and/or revoke the consent and /or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.
- In case of change of ownership/ management the name and address of the new owners/ partners/ directors/ proprietor should immediately be intimated to the Board.
- The consent to operate the industrial plant shall lapse if at any time the any conditions of this consent order are not complied with.
- The application shall also comply with the General Conditions as per Annexure-I enclosed.

**PENALTY PROVISIONS :** If the applicant fails to comply with the conditions and other directives issued by this Board as laid down in this order, the applicant is liable for prosecution under Section 43&44 and other penal

provisions of the Act and shall on Conviction, be liable for punishment and imprisonment as provided in the said Act.

#### CONDITIONS UNDER AIR ACT 1981:

4.1. The following shall be used as fuel in boiler / furnace & heater respectively.

Sr. No.	Fuel	Quantity / Day
1	Natural gas (Boiler)	700 SCM/Hr.
2	Natural gas (Furnace of Train-A)	300 SCM/Hr.
3	Natural gas (Furnace of Train-B)	300 SCM/Hr.
4	Natural gas (Furnace of Train-C)	400S SCM/Hr.

The application shall install & operate air pollution control system in order to achieve norms prescribed below:

4.2. The flue gas emission through stack attached to boiler / furnace shall conform to the following standards:

Stack No.	Stack Attached To	Stack Height in Meter	APCM	Parameter	Permissible Limit
1	Boiler / Furnace	30	NOT	Particulate matter	150 mg/Nm <sup>3</sup>
				SO <sub>2</sub>	100 ppm
				NO <sub>x</sub>	50 ppm
2	D.G. Sets(125 KVA Cap.)	9	NOT	Particulate matter	150 mg/Nm <sup>3</sup>
				SO <sub>2</sub>	100 ppm
				NO <sub>x</sub>	50 ppm
3	D.G. Sets (30 KVA Cap)	8	NOT	Particulate matter	150 mg/Nm <sup>3</sup>
				SO <sub>2</sub>	100 ppm
				NO <sub>x</sub>	50 ppm
4	D.G. Sets ( 515 KVA Cap)	14	NOT	Particulate matter	150 mg/Nm <sup>3</sup>
				SO <sub>2</sub>	100 ppm
				NO <sub>x</sub>	50 ppm

4.3. There shall be process emission through various stacks / vent of reactors, process, vessel.

Stack No.	Stack Attached To	Stack Height in Meter	APCM	Parameter	Permissible Limit
1	De dusting unit nr. boiler	20	Dust collector	PM	150 mg/Nm <sup>3</sup>
2	Train-A	50	Cyclone followed by scrubber	PM	150 mg/Nm <sup>3</sup>
				NH <sub>3</sub>	175 mg/Nm <sup>3</sup>
				F	25 mg/Nm <sup>3</sup>
3	Train-B	50	Cyclone followed by scrubber	PM	150 mg/Nm <sup>3</sup>
				NH <sub>3</sub>	175 mg/Nm <sup>3</sup>
				F	25 mg/Nm <sup>3</sup>
4	Train-C	55	Cyclone followed by scrubber	PM	150 mg/Nm <sup>3</sup>
				NH <sub>3</sub>	175 mg/Nm <sup>3</sup>
				F	25 mg/Nm <sup>3</sup>
5	Prod. Handling sys. nr. sito	30	Scrubber	PM	150 mg/Nm <sup>3</sup>
6	prod. handling sys. nr. bagging	30	Scrubber	PM	150 mg/Nm <sup>3</sup>
7	de dusting unit nr. adm bu	25	Dust collector	PM	150 mg/Nm <sup>3</sup>

#### 4.4. D.G. SETS CONDITIONS

The D.G. Set shall have acoustic enclosure and shall comply with the standards specified at Sr. no. 95 of Schedule-I of the rule-3 of E.P. Rules -1986 and Noise pollution level as per the Air Act-1981.

D.G. Sets standards:-

The flue gas emission through stack attached to D.G. Sets shall conform to the following standards.



GPCB

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- The minimum height of stack to be provided with each of the generator set shall be  $H + 0.2 \sqrt{P}$  where H is total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed.
- Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.
- The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side ( If the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Under such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.
- The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).
- All efforts shall be made to bring down the noise level due to the D.G.Set, outside the premises, within the ambient noise requirements by proper siting and control measures.
- Installation of a D.G. Sets must be strictly in compliance with the recommendations of the D.G.Set manufacturer.
- A proper routine and preventive maintenance procedure for the D.G. Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use..

## 6. AUTHORIZATION as per HAZARDOUS AND OTHER WASTE (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016 Form-2 [Sec rule 6 (2)]

Form for grant of authorization for occupier or operator handling Hazardous waste

6.1 Authorization order No:- AWH-91132 date of Issue: 12/02/2018

6.2 M/S. GSEC SIKKA UNIT LTD (16971) is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at PLOT NO.S.NO-1 & 167/2, PO-MOTIKAVDI, KRAMBHAIYA, MOTIKHAVDI-3611140, TAL: DIST: JAMNAGAR.

Sr. No.	Waste	Cat.	Total per year	Facility
1	Used oil/ spent oil	I-5.1	16	Collection, Storage, Transportation and disposal selling to registered recycler.
2	Cotton waste containing oil	I-5.2	1	Collection, Storage, Transportation and disposal at CHWIF of SEPPIL.
3	Empty barrels/containers/tiners contaminated with hazardous chemicals/wastes	I-33.1	1	Collection, Storage, Transportation and disposal at CHWIF of SEPPIL.
4	Spent ion exchange resin containing toxic chemicals	I-34.2	0.2	Collection, Storage, Transportation and disposal at CHWIF of SEPPIL.
5	Oil Containing Cargo residue	I-3.1	0.2	Collection, Storage, Transportation and disposal at CHWIF of SEPPIL.

6.3 The authorization shall be valid up to 13/02/2023.

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986

6.5 The authorization is granted to operate a facility for collection, storage within factory premises transportation and ultimate disposal of Hazardous wastes as per condition no.7.2 to the industry having valid CCA of this Board.

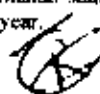
## 4.6. TERMS AND CONDITIONS OF AUTHORIZATION

- The applicant shall comply with the provisions of the Environment (Protection) Act-1986 and the rules made there under
- The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
- The persons authorized shall not rent, lend, sell, and transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.
- Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.

5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Wastes and Penalty"
7. It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
8. An application for the renewal of an authorization shall be made as laid down in rules 6(2) under Hazardous Waste and Other Waste Rules, 2016.
9. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
10. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
11. The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
12. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time
14. The waste generator shall be totally responsible for (i.e. collection, storage, transportation and ultimate disposal) the wastes generated.
15. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form-4 by 30<sup>th</sup> day of June of every year for the preceding period April to March.
16. In case of any accident, details of the same shall be submitted on Form-11 to Gujarat Pollution Control Board.
17. As per "Public Liability Insurance Act-91" company shall get Insurance Policy, if applicable.
18. Empty drums and containers of toxic and hazard material shall be treated as per guideline published for "Management & Handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
19. In case of transport of hazardous wastes to a facility for (i.e. treatment, storage and disposal) existing in a State other than the State where hazardous wastes are generated, the occupier shall obtain "No Objection Certificate" from the State Pollution Control Board or Committee of the concerned State of Union Territory Administration where the facility exists.
20. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with Form-4.
21. Industry shall have to display the relevant information with regards to hazardous waste as indicated in the Hon. Supreme Court's Order in W.P. No.657 of 1995 dated 14<sup>th</sup> October, 2003.
22. Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.

#### 4.5. GENERAL CONDITIONS:-

- 7.1. Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.
- 7.2. Applicant shall also comply with the general conditions given in annexure I.
- 7.3. Whenever due to accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body.
- 7.4. In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.
- 7.5. The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.
- 7.6. The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30<sup>th</sup> September every year.





# GUJARAT POLLUTION CONTROL BOARD

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GPCB Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.

7.8. In case of change of ownership/management the name and address of the new owners/ partners/directors/proprietor should immediately be intimated to the Board.

7.9. Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme order in w.p. no. 657 of 1995 dated 14<sup>th</sup> October 2003.

For and on behalf of  
Gujarat Pollution Control Board

(R. V. Patel)

SENIOR ENVIRONMENT ENGINEER

NO: PC/ CCA-JMN-2(5)ID-16971/

Date:-

Issued To:

M/S GSFC SIKKA UNIT LTD (16971)

PLOT NO.S.NO-1 & 167/2,

PO-MOTIKAVDI, KHAMBHALIYA,

MOTIKHAYDI-3611140,

TAL: DIST: JAMNAGAR.



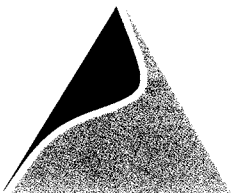
**GSFC Ltd. - Sikka Unit**

## Production details

PRODUCTION (MT)				
2015-16	DAP	APS	NPK-10	NPK-12
Apr-15	0	0	0	0
May-15	15500	0	0	0
Jun-15	27000	0	0	0
Jul-15	32960	0	0	0
Aug-15	66000	0	0	0
Sep-15	18600	18180	0	0
Oct-15	56850	0	0	0
Nov-15	55850	0	0	0
Dec-15	36600	0	0	0
Jan-16	0	0	19800	0
Feb-16	17360	0	230	27620
Mar-16	43480	0	0	0
<b>TOTAL</b>	<b>370200</b>	<b>18180</b>	<b>20030</b>	<b>27620</b>

2016-17	DAP	APS	NPK-10	NPK-12
Apr-16	22010	0	0	6490
May-16	62700	10460	0	0
Jun-16	75110	6180	0	0
Jul-16	40150	5220	14300	0
Aug-16	59350	0	8800	0
Sep-16	13270	16900	0	6700
Oct-16	13730	2530	0	0
Nov-16	34030	0	0	0
Dec-16	12280	0	0	0
Jan-17	19160	260	0	0
Feb-17	33950	0	0	2050
Mar-17	26110	0	0	0
<b>TOTAL</b>	<b>411850</b>	<b>41550</b>	<b>23100</b>	<b>15240</b>

2017-18	DAP	APS	NPK-10	NPK-12
Apr-17	33160	6500	0	6230
May-17	55330	0	4660	4970
Jun-17	74480	0	0	3070
Jul-17	42700	0	1570	1560
Aug-17	37180	0	2500	13690
Sep-17	57730	0	0	8770
Oct-17	68700	0	0	0
Nov-17	23290	0	17090	11780
Dec-17	43970	2460	0	21070
Jan-18	8500	4200	0	3950
Feb-18	17950	5630	210	13410
Mar-18	40840	1470	4700	34990
<b>TOTAL</b>	<b>503830</b>	<b>20260</b>	<b>30730</b>	<b>123490</b>



**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3134
Location:	PO: Moti Khavadi Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Station:	Approach Gate Security Cabin Terrace	Analysed By:	G M Desai
Sampling Duration:	24 hours	Receipt Date:	30/12/2017
Field Observation:	--	Receipt Time:	20:45
Monitoring Method:	IS: 5182 (Part 14) & (Part 5)	Received By:	Hitesh Parmar
Applicable Standard:	NAAQS-2009	Collection Date:	29/12/2017
		Collection Time:	12:20
		Collected By:	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 23) - 2006	66.87	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	38.75	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	11.00	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	12.25	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL: 10.0)	400.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit.

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

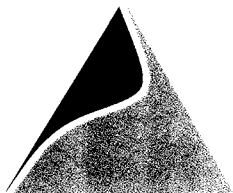
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Certificate No. T-2943



**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3135
Location:	PO: Moti Khavadi Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Station:	ADM Building Terrace	Analysed By:	G M Desai
Sampling Duration:	24 hours	Receipt Date:	30/12/2017
Field Observation:	--	Receipt Time:	20:45
Monitoring Method:	IS: 5182 (Part 14) & (Part 5)	Received By:	Hitesh Parmar
Applicable Standard:	NAAQS-2009	Collection Date:	29/12/2017
		Collection Time:	12:40
		Collected By:	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23):2006	62.93	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	34.15	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	10.45	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	11.86	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL: 10.0)	400.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

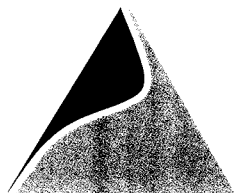
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**PRAKRUTI**  
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**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3133
Location:	PO: Moti Khavadi Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Station:	Electric Substation Terrace(Near Water Pond)	Analysed By:	G M Desai
Sampling Duration:	24 hours	Receipt Date:	30/12/2017
Field Observation:	--	Receipt Time:	20:45
Monitoring Method:	IS: 5182 (Part 14) & (Part 5)	Received By:	Hitesh Parmar
Applicable Standard:	NAAQS-2009	Collection Date:	29/12/2017
		Collection Time:	12:00
		Collected By:	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 23) - 2006	73.18	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	47.86	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	12.04	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	13.01	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL: 10.0)	400.00

**Remarks:**

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Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

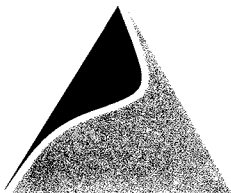
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Certificate No. T-2943



**TEST REPORT**  
**AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3137
Location:	PO: Moti Khavadi Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Station:	Ammonia Loading Station Terrace	Analysed By:	G M Desai
Sampling Duration:	24 hours	Receipt Date:	30/12/2017
Field Observation:	--	Receipt Time:	20:45
Monitoring Method:	IS: 5182 (Part 14) & (Part 5)	Received By:	Hitesh Parmar
Applicable Standard:	NAAQS-2009	Collection Date:	29/12/2017
		Collection Time:	13:00
		Collected By:	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 23) - 2006	71.98	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	46.47	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	11.52	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	14.78	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	18.42	400.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

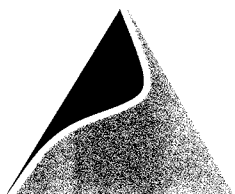
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**TEST REPORT**  
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**ENGINEERS**

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd. (Sikka Unit)</b>	<b>Ref. No.:</b>	3136
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	06/01/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	01/01/2018
<b>Station:</b>	Sikka Shore Terminal Site (Near WorkShop)	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	30/12/2017
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	20:45
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	29/12/2017
		<b>Collection Time:</b>	13:15
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23):2006	69.44	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	43.12	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	11.02	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	10.79	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	15.33	400.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

**Checked By: G M Desai (Lab in-charge)**

**Authorised Signatory: Krishna Desai (Partner)**

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3124
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	DAP Train- A (S-1)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	Natural Gas	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	2150 mm	Collection Time:	13:00
Emission Temperature:	52 °C	Collected By:	Kiran Chauhan
Velocity:	19.71 m/s		
Flow:	257475.38 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	18.17	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	16.70	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3125
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	DAP Train- B (S-2)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	Natural Gas	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	2150 mm	Collection Time:	13:50
Emission Temperature:	51 °C	Collected By:	Kiran Chauhan
Velocity:	19.78 m/s		
Flow:	258389.80 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	16.85	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	14.91	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3126
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	DAP Train- C (S-3)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	Natural Gas	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	3000 mm	Collection Time:	14:40
Emission Temperature:	50 °C	Collected By:	Kiran Chauhan
Velocity:	16.28 m/s		
Flow:	414065.52 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	16.76	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	15.81	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

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Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3132
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	Boiler No.-1 GT- 2479 (S-4)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	Natural Gas	Receipt Time:	20:45
Fuel Consumption:	100 m <sup>3</sup> /hr	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	1250 mm	Collection Time:	12:05
Emission Temperature:	98 °C	Collected By:	Kiran Chauhan
Velocity:	4.64 m/s		
Flow:	20488.50 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	6.03	150
2	Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 2) - 1985, R-2009	4.77 (1.82 ppm)	100 ppm
3	Nitrogen Oxide (as NO <sub>x</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 7) 2005	24.12 (12.82 ppm)	50 ppm

**Remarks:**

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Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
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**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3131
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	DG Set (30 KVA) Behind C-Train	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	HSD	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	100 mm	Collection Time:	15:25
Emission Temperature:	102 °C	Collected By:	Kiran Chauhan
Velocity:	13.88 m/s		
Flow:	392.25 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	31.16	150
2	Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 2) - 1985, R-2009	57.82 (22.09 ppm)	100 ppm
3	Nitrogen Oxide (as NO <sub>x</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 7) 2005	48.24 (25.64 ppm)	50 ppm

**Remarks:**

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Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI  
ENVIRONMENTAL  
ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3130
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	Dedusting Old Cylo (S-6) Near Bagging	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	--	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	30/12/2017
Stack Diameter:	1028 mm	Collection Time:	11:00
Emission Temperature:	30 °C	Collected By:	Kiran Chauhan
Velocity:	13.52 m/s		
Flow:	40377.10 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	11.19	150.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

**Note:**

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3127
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	Dedusting (Bagging Plant-A)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	--	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	900 mm	Collection Time:	16:10
Emission Temperature:	30 °C	Collected By:	Kiran Chauhan
Velocity:	15.62 m/s		
Flow:	35755.12 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	12.21	150.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3128
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	Dedusting (Bagging Plant-B)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	--	Receipt Time:	20:45
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	8 m	Collection Date:	29/12/2017
Stack Diameter:	900 mm	Collection Time:	17:55
Emission Temperature:	30 °C	Collected By:	Kiran Chauhan
Velocity:	15.54 m/s		
Flow:	35571.99 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	10.59	150.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI  
ENVIRONMENTAL  
ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3129
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Stack Attached To:	Dedusting New Cylo (Product Hardening Dedusting)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	30/12/2017
Fuel Type:	--	Receipt Time:	20:45
Fuel Consumption:	8	Received By:	Hitesh Parmar
Stack Height:	30 m	Collection Date:	30/12/2017
Stack Diameter:	1100 mm	Collection Time:	10:05
Emission Temperature:	30 °C	Collected By:	Kiran Chauhan
Velocity:	15.02 m/s		
Flow:	51360.29 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	11.38	150.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

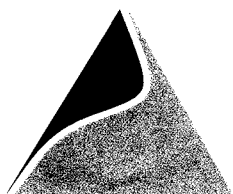
Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT**  
**(WATER AND WASTE WATER)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3122
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Sample Description:	Treated Domestic Effluent	Analysed By:	Ripple Vaidya
Sampling Point:	STP Outlet (Factory)	Receipt Date:	30/12/2017
Sample Type:	Grab	Receipt Time:	20:45
Field Observation:	pH: 7.5 Temperature: 27°C	Received By:	Hitesh Parmar
Sampling Method:	IS: 3025 (Part 1) - 1987, R 2009	Collection Date:	30/12/2017
Applicable Standard:	On land for Plantation	Collection Time:	10:30
		Collected By:	Mayur Raj

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	pH	-	APHA 4500-H <sup>+</sup> B, Standard Methods 22nd Edition	7.46	--
2	Total Suspended Solids	mg/l	APHA 2540 D, Standard Methods 22nd Edition	24.00	30.00
3	Biochemical Oxygen Demand (3d at 27 °C as BOD)	mg/l	IS: 3025 (Part 44) – 1993	16.00	20.00
4	Chlorine (Residual as Cl <sub>2</sub> )	mg/l	APHA 4500-Cl G DPD Colorimetric KIT Method	0.80	> 0.50

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

**Note:**

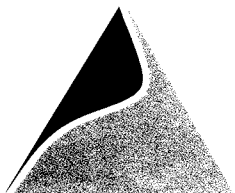
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**End of Report**



Certificate No. T-2943





**TEST REPORT**  
**(WATER AND WASTE WATER)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3123
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	01/01/2018
Sample Description:	Treated Domestic Effluent	Analysed By:	Ripple Vaidya
Sampling Point:	STP Outlet (Colony)	Receipt Date:	30/12/2017
Sample Type:	Grab	Receipt Time:	20:45
Field Observation:	pH: 7.6 Temperature: 27°C	Received By:	Hitesh Parmar
Sampling Method:	IS: 3025 (Part 1) - 1987, R 2009	Collection Date:	30/12/2017
Applicable Standard:	On land for Plantation	Collection Time:	11:15
		Collected By:	Mayur Raj

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	pH	-	APHA 4500-H <sup>+</sup> B, Standard Methods 22nd Edition	7.57	--
2	Total Suspended Solids	mg/l	APHA 2540 D, Standard Methods 22nd Edition	26.00	30.00
3	Biochemical Oxygen Demand (3d at 27 °C as BOD)	mg/l	IS: 3025 (Part 44) – 1993	18.00	20.00
4	Chlorine (Residual as Cl <sub>2</sub> )	mg/l	APHA 4500-Cl G DPD Colorimetric KIT Method	0.70	> 0.50

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

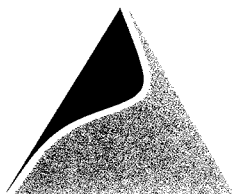
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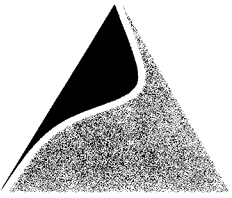
# TEST REPORT NOISE LEVEL

# PRAKRUTI ENVIRONMENTAL ENGINEERS

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd.</b>	<b>Ref. No.:</b>	3138
	<b>(Sikka Unit)</b>	<b>Report Date:</b>	06/01/2018
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Monitoring Date:</b>	29/12/2017
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Monitored By:</b>	Mayur Raj
<b>Monitored Method:</b>	--		

SN	Station	Start Date	Start Time	End Date	End Time	Time Duration	NOISE LEVEL dB(A) Leq
1	ADM Building	29/12/2017	12:00:11	29/12/2017	12:17:09	0:16:58	63.7
2	Boiler House	29/12/2017	12:19:16	29/12/2017	12:35:02	0:15:46	72.3
3	DAP Plant Ground Floor	29/12/2017	12:36:55	29/12/2017	12:54:14	0:17:19	73.8
4	QC Laboratory	29/12/2017	13:12:02	29/12/2017	13:28:49	0:16:47	56.8
5	Control Room A/B Train	29/12/2017	13:33:17	29/12/2017	13:49:13	0:15:56	62.5
6	Control Room C Train	29/12/2017	13:54:29	29/12/2017	14:11:27	0:16:58	64.1
7	Control Room Bagging	29/12/2017	14:16:01	29/12/2017	14:33:42	0:17:41	62.8
8	Bentonite Cylo Room	29/12/2017	14:38:30	29/12/2017	14:54:27	0:15:57	67.9
9	Security Office Factory Side	29/12/2017	15:10:22	29/12/2017	15:27:11	0:16:49	60.8
10	Electrical Substation	29/12/2017	15:33:18	29/12/2017	15:51:17	0:17:59	59.2
11	ADM Building	29/12/2017	22:02:12	29/12/2017	22:18:31	0:16:19	58.6
12	Boiler House	29/12/2017	22:20:53	29/12/2017	22:38:16	0:17:23	71.6
13	DAP Plant Ground Floor	29/12/2017	22:40:07	29/12/2017	22:57:22	0:17:15	71.1
14	QC Laboratory	29/12/2017	23:03:11	29/12/2017	23:20:36	0:17:25	55.2
15	Control Room A/B Train	29/12/2017	23:25:47	29/12/2017	23:47:11	0:21:24	61.7
16	Control Room C Train	29/12/2017	23:52:16	30/12/2017	0:10:50	0:18:34	61.5
17	Control Room Bagging	30/12/2017	0:16:21	30/12/2017	0:33:19	0:16:58	60.9
18	Bentonite Cylo Room	30/12/2017	0:40:37	30/12/2017	1:02:12	0:21:35	62.3
19	Security Office Factory Side	30/12/2017	1:07:57	30/12/2017	1:22:48	0:14:51	57.2
20	Electrical Substation	30/12/2017	1:30:07	30/12/2017	1:50:22	0:20:15	55.8

Permissible Exposure in cases of Continuous Noise (as prescribed in Factories Act, 1948)		Permissible Exposure Level for Impulsive or Impact Noise	
Total time of exposure (continuous or a number of short terms exposure) per day,	Sound Pressure Level in dB (A)	Peak Sound Pressure Level in dB	Permitted number of impulse or impact per day
8	90	140	100
6	92	135	315
4	95	130	1000
3	97	125	3160
2	100	120	10000
1 1/2	102	1. No exposure in excess of 140 dB peak sound pressure level is permitted	
1	105		
3/4	107		
1/2	110		
1/4	115		
1. No exposure in excess of 115 dB(A) is to be permitted			
2. For any period of exposure between any figure and the next higher or lower figure as indicated in column1, the permissible sound pressure level is to be determined by extrapolation on proportionate basis			



**TEST REPORT  
NOISE LEVEL)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Remarks:

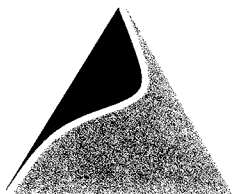
Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT**  
**(METEOROLOGICAL MEASUREMENTS)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3139
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	06/01/2018
Authorised Person:	Mr. S. A. Desai	Collected By:	Mayur Raj
Station:	A/B Train Terrace		
Field Observation:	--		
Monitoring Method/ Guidelines:	IS: 5182 (Part 14) - 2005		

DATE	TIME	8	WIND SPEED	TEMPERATURE	RELATIVE HUMIDITY
		TO	KMPH	°C	%
29/12/2017	12:00	NE→SW	11.0	26.0	36.0
	14:00	NW→SE	15.0	30.0	26.0
	16:00	NW→SE	12.0	29.0	30.0
	18:00	N→S	11.0	28.0	34.0
	20:00	NE→SW	6.0	23.0	51.0
	22:00	NE→SW	7.0	20.0	51.0
30/12/2017	0:00	NE→SW	6.0	19.0	53.0
	2:00	NE→SW	9.0	18.0	54.0
	4:00	NE→SW	6.0	15.0	57.0
	6:00	NE→SW	7.0	16.0	54.0
	8:00	NE→SW	7.0	16.0	42.0
	10:00	NE→SW	8.0	20.0	33.0
	12:00	NE→SW	10.0	25.0	30.0
MAX.			15.00	30.00	57.00
MIN.			6.00	15.00	26.00
AVG.			8.85	21.92	42.38

Remarks:

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishnak Desai (Partner)

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**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd. (Sikka Unit)</b>	<b>Ref. No.:</b>	3407
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Station:</b>	Approach Gate Security Cabin Terrace	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	02/02/2018
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	10:30
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	31/01/2018
		<b>Collection Time:</b>	12:00
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	EN 12341	61.96	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	34.24	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	10.56	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	10.12	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL: 10.0)	400.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

**Checked By: G M Desai (Lab in-charge)**

**Authorised Signatory: Krishna Desai (Partner)**

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Certificate No. T-2943

**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

<b>Customer:</b>	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	<b>Ref. No.:</b>	3408
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Station:</b>	ADM Building Terrace	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	02/02/2018
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	10:30
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	31/01/2018
		<b>Collection Time:</b>	12:20
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	EN 12341	58.00	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	29.26	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	9.12	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	9.18	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL: 10.0)	400.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

**Checked By: G M Desai (Lab in-charge)**

**Authorised Signatory: Krishna Desai (Partner)**

**Note:**

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Certificate No. T-2943

**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd. (Sikka Unit)</b>	<b>Ref. No.:</b>	3406
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Station:</b>	Electric Substation Terrace(Near Water Pond)	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	02/02/2018
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	10:30
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	31/01/2018
		<b>Collection Time:</b>	11:35
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	EN 12341	67.93	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	40.90	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	12.48	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	14.08	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	BDL (DL; 10.0)	400.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

**Checked By: G M Desai (Lab in-charge)**

**Authorised Signatory: Krishna Desai (Partner)**

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Certificate No. T-2943

**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd. (Sikka Unit)</b>	<b>Ref. No.:</b>	3410
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Station:</b>	Ammonia Loading Station Terrace	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	02/02/2018
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	10:30
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	31/01/2018
		<b>Collection Time:</b>	13:00
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	EN 12341	66.85	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	42.12	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	13.44	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	13.19	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	28.5	400.00

**Remarks:**

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**Checked By: G M Desai (Lab in-charge)**

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Certificate No. T-2943



**TEST REPORT**  
**(AMBIENT AIR QUALITY)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

<b>Customer:</b>	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	<b>Ref. No.:</b>	3409
<b>Location:</b>	PO: Moti Khavadi Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Station:</b>	Sikka Shore Terminal Site (Near WorkShop)	<b>Analysed By:</b>	G M Desai
<b>Sampling Duration:</b>	24 hours	<b>Receipt Date:</b>	02/02/2018
<b>Field Observation:</b>	--	<b>Receipt Time:</b>	10:30
<b>Monitoring Method:</b>	IS: 5182 (Part 14) & (Part 5)	<b>Received By:</b>	Hitesh Parmar
<b>Applicable Standard:</b>	NAAQS-2009	<b>Collection Date:</b>	31/01/2018
		<b>Collection Time:</b>	13:45
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM <sub>10</sub> )	µg/m <sup>3</sup>	EN 12341	71.02	100.00
2	Particulate Matter (as PM <sub>2.5</sub> )	µg/m <sup>3</sup>	SOP-TCH-001	45.10	60.00
3	Sulphur Dioxide (as SO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 2):2001, R 2012	12.96	80.00
4	Oxides of Nitrogen (as NO <sub>2</sub> )	µg/m <sup>3</sup>	IS: 5182 (Part 6):2006, R 2012	11.77	80.00
5	Ammonia (as NH <sub>3</sub> )	µg/m <sup>3</sup>	SOP-TCH-033	15.59	400.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

**Checked By:** G M Desai (Lab in-charge)

**Authorised Signatory:** Krishna Desai (Partner)

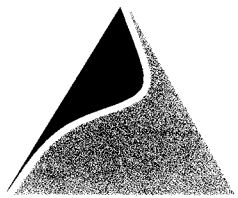
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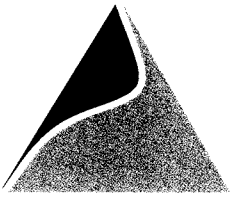
**TEST REPORT  
(NOISE LEVEL)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

<b>Customer:</b>	<b>Gujarat State Fertilizers &amp; Chemicals Ltd.</b>	<b>Ref. No.:</b>	<b>3411</b>
	<b>(Sikka Unit)</b>	<b>Report Date:</b>	<b>08/02/2018</b>
<b>Location:</b>	<b>PO: Moti Khavadi Dist: Jamnagar-361140</b>	<b>Monitoring Date:</b>	<b>31/01/2018</b>
<b>Authorised Person:</b>	<b>Mr. S. A. Desai</b>	<b>Monitored By:</b>	<b>K R Chauhan</b>
<b>Monitored Method:</b>	<b>--</b>		

SN	Station	Start Date	Start Time	End Date	End Time	Time Duration	NOISE LEVEL dB(A) Leg
1	ADM Building	31/01/2018	11:05:18	31/01/2018	11:17:22	0:12:04	62.9
2	Boiler House	31/01/2018	11:20:50	31/01/2018	11:31:07	0:10:17	73.1
3	DAP Plant Ground Floor	31/01/2018	11:35:12	31/01/2018	11:53:26	0:18:14	72.6
4	QC Laboratory	31/01/2018	11:57:09	31/01/2018	12:09:40	0:12:31	55.4
5	Control Room A/B Train	31/01/2018	12:15:11	31/01/2018	12:27:02	0:11:51	63.2
6	Control Room C Train	31/01/2018	12:30:32	31/01/2018	12:43:17	0:12:45	63.7
7	Control Room Bagging (Old)	31/01/2018	12:45:19	31/01/2018	13:00:08	0:14:49	61.9
8	Bentonite Cylo Room	31/01/2018	13:10:22	31/01/2018	13:20:55	0:10:33	68.3
9	Security Office Factory Side	31/01/2018	13:31:15	31/01/2018	13:42:19	0:11:04	62.5
10	Electrical Substation	31/01/2018	13:50:01	31/01/2018	14:01:23	0:11:22	58.6
11	Bagging-A Control Room	31/01/2018	14:07:18	31/01/2018	14:30:49	0:23:31	64.9
12	Bagging Line-A	31/01/2018	14:42:36	31/01/2018	14:55:05	0:12:29	69.3
13	ADM Building	31/01/2018	22:00:07	31/01/2018	22:12:52	0:12:45	57.2
14	Boiler House	31/01/2018	22:21:19	31/01/2018	22:32:08	0:10:49	72.6
15	DAP Plant Ground Floor	31/01/2018	22:40:23	31/01/2018	22:52:10	0:11:47	72.4
16	QC Laboratory	31/01/2018	23:00:14	31/01/2018	23:10:39	0:10:25	53.8
17	Control Room A/B Train	31/01/2018	23:15:22	31/01/2018	23:27:09	0:11:47	61.3
18	Control Room C Train	31/01/2018	23:33:16	31/01/2018	23:45:12	0:18:34	62.0
19	Control Room Bagging (Old)	31/01/2018	0:02:21	31/01/2018	0:14:37	0:12:16	60.7
20	Bentonite Cylo Room	01/02/2018	0:20:19	01/02/2018	0:31:52	0:11:33	58.6
21	Security Office Factory Side	01/02/2018	0:42:50	01/02/2018	0:55:13	0:12:23	56.8
22	Electrical Substation	01/02/2018	1:05:31	01/02/2018	1:18:47	0:13:16	57.1
23	Bagging-A Control Room	01/02/2018	1:25:41	01/02/2018	1:37:11	0:11:30	67.7
24	Bagging Line-A	01/02/2018	1:47:11	01/02/2018	1:59:22	0:12:11	70.1

Permissible Exposure in cases of Continuous Noise (as prescribed in Factories Act, 1948)		Permissible Exposure Level for Impulsive or Impact Noise	
Total time of exposure (continuous or a number of short terms exposure) per day,	Sound Pressure Level in dB (A)	Peak Sound Pressure Level in dB	Permitted number of impulse or impact per day
8	90	140	100
6	92	135	315
4	95	130	1000
3	97	125	3160
2	100	120	10000
1 1/2	102	1. No exposure in excess of 140 dB peak sound pressure level is permitted	
1	105		
3/4	107		
1/2	110		
1/4	115		
1. No exposure in excess of 115 dB(A) is to be permitted			



**TEST REPORT  
(NOISE LEVEL)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

2. For any period of exposure between any figure and the next higher or lower figure as indicated in column1, the permissible sound pressure level is to be determined by extrapolation on proportionate basis

**Remarks:**

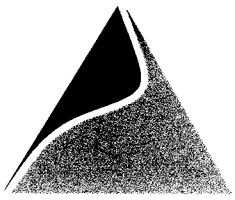
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Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT**  
**(METEOROLOGICAL MEASUREMENTS)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3412
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Collected By:	Mayur Raj
Station:	A/B Train Terrace		
Field Observation:	--		
Monitoring Method/ Guidelines:	IS: 5182 (Part 14) - 2005		

DATE	TIME	8	WIND SPEED	TEMPERATURE	RELATIVE HUMIDITY
		TO	KMPH	°C	%
31/01/2018	12:00	NE→SW	6.0	27.0	36.0
	14:00	N→S	8.0	32.0	19.0
	16:00	N→S	9.0	34.0	21.0
	18:00	N→S	15.0	33.0	23.0
	20:00	NW→SE	12.0	24.0	53.0
	22:00	NW→SE	13.0	23.0	54.0
01/02/2018	0:00	NW→SE	15.0	22.0	60.0
	2:00	NW→SE	11.0	20.0	69.0
	4:00	NW→SE	9.0	18.0	73.0
	6:00	NW→SE	8.0	18.0	75.0
	8:00	N→S	6.0	18.0	77.0
	10:00	NW→SE	11.0	23.0	53.0
	12:00	NW→SE	17.0	27.0	43.0
MAX.			17.00	34.00	77.00
MIN.			6.00	18.00	19.00
AVG.			10.77	24.54	50.46

Remarks:

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION))**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3397
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	DAP Train- A (S-1)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	Natural Gas	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	50 m	Collection Date:	31/01/2018
Stack Diameter:	2150 mm	Collection Time:	14:15
Emission Temperature:	51 °C	Collected By:	Mayur Raj
Velocity:	19.64 m/s		
Flow:	256560.95 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	16.35	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	17.09	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

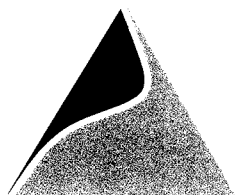
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Certificate No. T-2943



**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3396
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	DAP Train- B (S-2)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	Natural Gas	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	50 m	Collection Date:	31/01/2018
Stack Diameter:	2150 mm	Collection Time:	13:30
Emission Temperature:	52 °C	Collected By:	Mayur Raj
Velocity:	19.69 m/s		
Flow:	257214.11 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	17.15	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	15.87	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

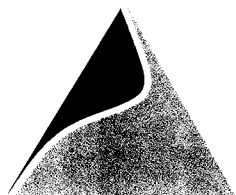
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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3395
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	DAP Train- C (S-3)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	Natural Gas	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	55 m	Collection Date:	31/01/2018
Stack Diameter:	3000 mm	Collection Time:	12:45
Emission Temperature:	52 °C	Collected By:	Mayur Raj
Velocity:	16.26 m/s		
Flow:	413556.84 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	15.68	150.00
2	Ammonia (as NH <sub>3</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 6) 1999, R 2003	16.48	175.00
3*	Hydrogen Fluoride (as HF)	mg/Nm <sup>3</sup>	Method 13 A, EPA: 2007	BDL (DL: 1.0)	25.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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Certificate No. T-2943

**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3398
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Boiler No.-1 GT- 2479 (S-4)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	Natural Gas	Receipt Time:	10:30
Fuel Consumption:	100 m <sup>3</sup> /hr	Received By:	Hitesh Parmar
Stack Height:	30.5 m	Collection Date:	31/01/2018
Stack Diameter:	1250 mm	Collection Time:	12:00
Emission Temperature:	102 °C	Collected By:	Mayur Raj
Velocity:	4.58 m/s		
Flow:	20223.56 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	5.72	150
2	Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 2) - 1985, R-2009	5.74 (2.19 ppm)	100 ppm
3	Nitrogen Oxide (as NO <sub>x</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 7) 2005	26.97 (14.34 ppm)	50 ppm

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

**Note:**

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Certificate No. T-2943



**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3402
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Dedusting Old Cylo S-5 (Near Product Cylo)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	30 m	Collection Date:	31/01/2018
Stack Diameter:	850 mm	Collection Time:	16:30
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	13.56 m/s		
Flow:	27686.60 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	15.38	150.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

**Note:**

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Certificate No. T-2943

**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3403
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Dedusting Old Cylo (S-6) Near Bagging	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	30 m	Collection Date:	31/01/2018
Stack Diameter:	1028 mm	Collection Time:	17:15
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	13.48 m/s		
Flow:	40257.64 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	15.66	150.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

**Note:**

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Certificate No. T-2943

**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3405
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Bentonite Cylo S-7 (Boiler Side)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	20 m	Collection Date:	01/02/2018
Stack Diameter:	1000 mm	Collection Time:	10:30
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	14.88 m/s		
Flow:	42050.88 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	17.27	150.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

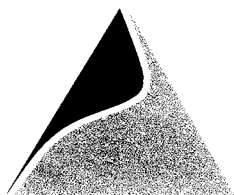
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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3404
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Bentonite Cylo S-8 (ADM Side)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	25 m	Collection Date:	01/02/2018
Stack Diameter:	300 mm	Collection Time:	9:45
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	15.02 m/s		
Flow:	3820.19 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	13.17	150.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

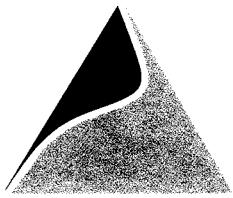
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Certificate No. T-2943



**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3399
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	DG Set (515 KVA) Sikka Shore Terminal Site	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	HSD	Receipt Time:	10:30
Fuel Consumption:	100 LPH	Received By:	Hitesh Parmar
Stack Height:	14 m	Collection Date:	01/02/2018
Stack Diameter:	550 mm	Collection Time:	12:30
Emission Temperature:	95 °C	Collected By:	Mayur Raj
Velocity:	11.46 m/s		
Flow:	9796.75 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	28.34	150
2	Sulphur Dioxide (as SO <sub>2</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 2) - 1985, R-2009	60.90 (23.26 ppm)	100 ppm
3	Nitrogen Oxide (as NO <sub>x</sub> )	mg/Nm <sup>3</sup>	IS: 11255 (Part 7) 2005	50.83 (27.02 ppm)	50 ppm

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3400
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Dedusting (Bagging Plant-A)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	43 m	Collection Date:	31/01/2018
Stack Diameter:	900 mm	Collection Time:	15:00
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	15.58 m/s		
Flow:	35663.55 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	14.12	150.00

**Remarks:**

1. BDL: Below Detactable Limit, DL: Detactable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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Certificate No. T-2943

**TEST REPORT  
(AIR EMISSION)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3401
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Stack Attached To:	Dedusting New Cylo (Product Hardening Dedusting)	Analysed By:	G M Desai
Air Pollution Control System:	--	Receipt Date:	02/02/2018
Fuel Type:	--	Receipt Time:	10:30
Fuel Consumption:	--	Received By:	Hitesh Parmar
Stack Height:	30 m	Collection Date:	31/01/2018
Stack Diameter:	1100 mm	Collection Time:	15:45
Emission Temperature:	32 °C	Collected By:	Mayur Raj
Velocity:	15.1 m/s		
Flow:	51633.85 m <sup>3</sup> /hr		
Field Observation:	--		
Flow Rate Measurement:	IS 11255 (Part 3) - 2008		
Applicable Standard:	--		

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	Particulate Matter (as PM)	mg/Nm <sup>3</sup>	IS: 11255 (Part 1) - 1985, R-2009	12.97	150.00

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

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Certificate No. T-2943

**TEST REPORT**  
**(WATER AND WASTE WATER)**

**PRAKRUTI**  
ENVIRONMENTAL  
ENGINEERS

Customer:	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	Ref. No.:	3393
Location:	PO: Moti Khavadi, Dist: Jamnagar-361140	Report Date:	08/02/2018
Authorised Person:	Mr. S. A. Desai	Analysis Date:	03/02/2018
Sample Description:	Treated Domestic Effluent	Analysed By:	Ripple Vaidya
Sampling Point:	STP Outlet (Factory)	Receipt Date:	02/02/2018
Sample Type:	Grab	Receipt Time:	10:30
Field Observation:	pH: 6.9 Temperature: 29°C	Received By:	Hitesh Parmar
Sampling Method:	IS: 3025 (Part 1) - 1987, R 2009	Collection Date:	01/02/2018
Applicable Standard:	On land for Plantation	Collection Time:	10:45
		Collected By:	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	pH	-	APHA 4500-H <sup>+</sup> B, Standard Methods 22nd Edition	6.94	--
2	Total Suspended Solids	mg/l	APHA 2540 D, Standard Methods 22nd Edition	26.00	30.00
3	Biochemical Oxygen Demand (3d at 27 °C as BOD)	mg/l	IS: 3025 (Part 44) – 1993	18.00	20.00
4	Chlorine (Residual as Cl <sub>2</sub> )	mg/l	APHA 4500-Cl G DPD Colorimetric KIT Method	0.70	> 0.50

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

Checked By: G M Desai (Lab in-charge)

Authorised Signatory: Krishna Desai (Partner)

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Certificate No. T-2943



**TEST REPORT**  
**(WATER AND WASTE WATER)**

**PRAKRUTI**  
**ENVIRONMENTAL**  
**ENGINEERS**

<b>Customer:</b>	Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)	<b>Ref. No.:</b>	3394
<b>Location:</b>	PO: Moti Khavadi, Dist: Jamnagar-361140	<b>Report Date:</b>	08/02/2018
<b>Authorised Person:</b>	Mr. S. A. Desai	<b>Analysis Date:</b>	03/02/2018
<b>Sample Description:</b>	Treated Domestic Effluent	<b>Analysed By:</b>	Ripple Vaidya
<b>Sampling Point:</b>	STP Outlet (Colony)	<b>Receipt Date:</b>	02/02/2018
<b>Sample Type:</b>	Grab	<b>Receipt Time:</b>	10:30
<b>Field Observation:</b>	pH: 6.9 Temperature: 29°C	<b>Received By:</b>	Hitesh Parmar
<b>Sampling Method:</b>	IS: 3025 (Part 1) - 1987, R 2009	<b>Collection Date:</b>	01/02/2018
<b>Applicable Standard:</b>	On land for Plantation	<b>Collection Time:</b>	12:30
		<b>Collected By:</b>	Satyendra

SN	PARAMETERS	UNITS	METHOD REFERENCE	RESULTS	PERMISSIBLE LIMIT
1	pH	-	APHA 4500-H <sup>+</sup> B, Standard Methods 22nd Edition	6.85	--
2	Total Suspended Solids	mg/l	APHA 2540 D, Standard Methods 22nd Edition	28.00	30.00
3	Biochemical Oxygen Demand (3d at 27 °C as BOD)	mg/l	IS: 3025 (Part 44) – 1993	18.00	20.00
4	Chlorine (Residual as Cl <sub>2</sub> )	mg/l	APHA 4500-Cl G DPD Colorimetric KIT Method	0.80	> 0.50

**Remarks:**

1. BDL: Below Detectable Limit, DL: Detectable Limit

**Checked By: G M Desai (Lab in-charge)**

**Authorised Signatory: Krishna Desai (Partner)**

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Certificate No. T-2943

**F. No. J-11011/17/2013-IA II (I)**  
**Government of India**  
**Ministry of Environment, Forests and Climate Change**  
**(I.A. Division)**

Indira Paryavaran Bhawan  
 Aliganj, Jorbagh Road,  
 New Delhi -110003

E-mail : lk.bokolia@nic.in  
 Telefax : 011: 2436 0108  
 Dated 9<sup>th</sup> October, 2014

To,

Dr. G.C. Kamdar  
 Dy General Manager (EC) & MR  
 M/s Gujarat State Fertilizer & Chemicals Ltd.  
 Sikka Unit, Post-Motikhavdi,  
 District-Jamnagar, Gujarat-361140.

E-mail: gck\_su@gsfcltd.com; Fax: 0288 2344034

**Subject: Capacity Augmentation of existing DAP/NPK Plant of M/s Gujarat State Fertilizers & Chemicals Ltd, Sikka Unit, Post Motikhavdi, Jamnagar, Gujarat – Environmental Clearance reg.**

**Ref.: Your letter no. nil dated 31<sup>st</sup> January, 2014**

Sir,

This has reference to your letter dated 31<sup>st</sup> January, 2014 alongwith project documents including Form-I, Terms of References, Pre-feasibility Report, EIA/EMP Report and subsequent submission of additional information vide letters dated 13<sup>th</sup> February, 2014, 21<sup>st</sup> March, 2014 and 20<sup>th</sup> May, 2014 regarding above mentioned project. MoEF & CC vide letter no. 11-90/2012-IA.III dated 16<sup>th</sup> September, 2014 has granted CRZ clearance for dredging in front of existing captive jetty near turning circle, laying of additional pipeline and addition of Ammonia and Phosphoric Acid tanks in the existing Sikka Shore Terminal of Gulf of Kutchch, Gujarat.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for capacity augmentation of existing DAP/NPK Plant of M/s Gujarat State Fertilizers & Chemicals Ltd, Sikka Unit, Post Motikhavdi, Jamnagar, Gujarat. Total plot area 104000 m<sup>2</sup>. The marine national park is located at a distance of 7 km from the project site. Total plot area is 235.2 ha of which greenbelt will be developed in 33.86 ha. Project cost is Rs. 900 crores. The environmental clearance for the DAP/NPK plant A,B trains and DAP/NPK plant C trains was obtained from MOEF on 31.7.1990 and 11.12.2001 respectively. Marine National Park (Gulf of Kutch) is located at a distance of 7 Km. A copy of letter no. WLP/32/B/1041-42 of 2014-15 dated 6<sup>th</sup> May, 2014 issued by Principal Chief Conservator of Forests, Wildlife, Gujarat State, Gandhinagar has been submitted, wherein it is mentioned that the required area is not a part of Marine Sanctuary and Marine National park and is also outside of Eco-sensitive Zone of MNP and Marine Sanctuary. Following are the details of the existing and proposed products details.

S.N.	Product details	Existing Capacity MTPA	Proposed Capacity MTPA	Total MTPA
1.	DAP/NPK	9.846 Lakhs	5.4 Lakhs	15.246 Lakhs

**Associated facilities (Isolated storages details)**

- i. Installation of three phosphoric acid and two ammonia tanks of 10000 MT capacity at Sikka Shore Terminal

*Jul*

- ii. Installation of one ammonia tank and one phosphoric acid tank of 10000 MT capacity within the plant premises
- iii. Laying of ammonia and phosphoric acid pipeline (10 Km) on the existing over head structure from Sikka shore terminal to plant site.

There are 2 storage tanks of 3000MT in the plant and decided that there would be 2 storage tanks of 10,000 MT capacity and storage at any time will not exceed 16,000 MT of a total capacity of 26,000MT. Transportation of liquid raw material (ammonia & Phosphoric acid) by overhead pipeline from Jetty to Sikka Shore Terminal and Sikka Shore Terminal to plant site. Ammonia will be transported by tail tankers. Transportation of sulphuric acid and furnace oil will be by road tanker. Finish product will be transported by truck and rail wagon.

3.0 Bagfilter with extraction system will be provided at raw material handling area. Scrubber system will be installed at product bagging area. Venturi scrubber and cyclone will be provided in the process plant. Fresh water requirement from ground water source will be increased from 1500 m3/day to 2160 m3/day after expansion. Effluent generated will be treated in the Effluent Treatment Plant and treated effluent will be recycled/reused in the process. No effluent will be discharged outside the plant premises and 'Zero' effluent discharge concept will be followed. ETP sludge will be sent to Treatment Storage Disposal Facility (TSDF) for hazardous waste. Spent catalysts and used oil will be sold to authorized re-processors/recyclers.

4.0 Public hearings/public consultation was held on 17<sup>th</sup> January, 2014.

5.0 All the Fertilizer Plant are listed at S.N. 5(a) under Category 'A' and appraised at the Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 6<sup>th</sup>, 18<sup>th</sup> and 20<sup>th</sup> meetings held during 5<sup>th</sup>-7<sup>th</sup> March, 2013, 28<sup>th</sup>-30<sup>th</sup> April, 2014 and 23<sup>rd</sup>-24<sup>th</sup> June, 2014 respectively. The Committee recommended the proposal for environmental clearance. Project Proponent and the EIA Consultant namely Bhagvati Ana Labs Ltd., have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006, subject to the compliance of the following Specific and General Conditions:

**A. SPECIFIC CONDITIONS:**

- i) All the conditions stipulated in environmental clearance letter dated 31<sup>st</sup> July, 1990, and letter no. J-11011/26/2001-IA (II) dated 11<sup>th</sup> December, 2001 accorded for the existing projects shall be implemented.
- ii) All the conditions stipulated in CRZ clearance letter no. 11-90/2012-IA.III dated 16<sup>th</sup> September, 2014 shall be implemented.
- iii) The gaseous emissions (SO<sub>2</sub>, Nox, NH<sub>3</sub>, HC, F) and particulate matter from various process units shall conform to the norms prescribed by the CPCB/SPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.
- iv) Ammonia bearing fumes from the reactor and granulator of the Complex Fertilizer shall be scrubbed. Scrubbing shall have interlocking system with main plant. Cyclone

*xyz*

followed by bag filter shall be provided to raw material handling area. Venturi scrubber and cyclone shall be provided in the process plant.

- v) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009. The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, Ammonia, Ozone, Fluoride and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the Gujarat Pollution Control Board (GPCB).
- vi) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions should conform to the limits stipulated by the GPCB.
- vii) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- viii) Total fresh water requirement from Gujarat Water Infrastructure Ltd./ ground water source shall not exceed 2160 m<sup>3</sup>/day. Permission from Central Ground Water Authority/ State Ground Water Authority may be obtained and submitted to the Ministry's Regional Office at Bhopal. PP shall construct additional rain water recharge pond with capacity of 15,000 m<sup>3</sup>.
- ix) Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. As proposed, Check dams with water storage capacity 3780 m<sup>3</sup> and 4500 m<sup>3</sup> respectively shall be created near plant premises.
- x) As proposed, industrial effluent shall be treated in effluent treatment plant (ETP) and recycled back in the process. Sewage shall be treated in STP and treated water shall be recycled/reused within factory premises.
- xi) All the effluents after treatment shall be routed to a properly lined guard pond for equalization and final control. In the guard pond, automatic monitoring system for flow, and relevant pollutants (i.e. pH, ammonical nitrogen, nitrate nitrogen, Fluoride etc) shall be provided with high level alarm system.
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) Regular monitoring of ground water by installing peizometric wells around the guard pond shall be periodically monitored and report shall be submitted to the concerned Regional Office of the Ministry, CPCB and SPCB.
- xiv) The company shall construct the garland drain all around the project site to prevent runoff of any chemicals containing waste into the nearby water bodies. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- xv) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.
- xvi) Spent catalysts and used oil shall be sold to authorized recyclers/re-processors only.

- xvii) The process of dredging should not cause any additional sediment load on coral and mangrove area in Gulf of Kutch water flow and mud. A Committee to be constituted as proposed by Wildlife Gujarat State and report to them after dredging.
- xviii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- xix) Remote operated valve placed on NH<sub>3</sub> line to avoid leakage/equipment check shall be performed to ensure that remote operated valve (ROV) is all time is functional.
- xx) All the commitments made to the public during Public Hearing/public consultation meeting held on 17<sup>th</sup> January, 2014 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xxi) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxii) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- xxiii) 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 OISD 117 norms.
- xxiv) Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- xxv) A comprehensive Green belt development plan shall be developed in at least 33 % area in and around the plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.
- xxvi) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

## **B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the Gujarat Pollution Control Board (GPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vi. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- vii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- viii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- ix. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
- x. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiii. The company shall earmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests 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.
- xiv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Gujarat Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xvi. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the Gujarat 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 Bhopal Regional Offices of MoEF by e-mail.

6 - 8


xvii. 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 at <http://envfor.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.

xviii. 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.

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

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

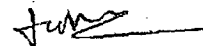
10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974; Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.



(Lalit Bokolia)  
Additional Director

**Copy to :-**

1. The Inspector General, Wildlife, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhavan, New Delhi.
2. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandhi Nagar - 382 010, Gujarat.
3. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
4. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
5. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
6. Monitoring Cell, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhavan, New Delhi.
7. Guard File/Monitoring File/Record File.



(Lalit Bokolia)  
Additional Director



**F. No. J-11011/17/2013-IA II (I)**  
**Government of India**  
**Ministry of Environment, Forests and Climate Change**  
**(I.A. Division)**

Indira Paryavaran Bhawan  
Aliganj, Jorbagh Road,  
New Delhi -110003

E-mail : lk.bokolia@nic.in  
Telefax : 011: 2436 95313  
Dated: 26<sup>th</sup> March , 2015

To,  
Dr. G.C. Kamdar  
Dy General Manager (EC) & MR  
M/s Gujarat State Fertilizer & Chemicals Ltd.  
Sikka Unit, Post-Motikhavdi,  
District-Jamnagar, Gujarat-361140.

E-mail: gck\_su@gsfcilt.com; Fax: 0288 2344034

**Subject: Capacity Augmentation of existing DAP/NPK Plant of M/s Gujarat State Fertilizers & Chemicals Ltd, Sikka Unit, Post Motikhavdi, Jamnagar, Gujarat – Amendment in Environmental Clearance reg.**

**Ref. : (i) Ministry's letter of even no. dated 9<sup>th</sup> October, 2014.**  
**(ii) Your letter no. GSFC/SU/EC/1/11 dated 14<sup>th</sup> November, 2014.**

Sir,

This is in continuation of this Ministry's letter dated 9<sup>th</sup> October, 2014 regarding the above mentioned subject, wherein following points are mentioned:

At para 2.0: "There are 2 storage tanks of 3000MT in the plant and decided that there would be 2 storage tanks of 10,000 MT capacity and storage at any time will not exceed 16,000 MT of a total capacity of 26,000MT"

At S.N. xxi of specific condition: "Atleast 5 % of the total cost of the project shall earmarked towards the Enterprise Social Commitment."

2.0 It was noted that additional two nos. ammonia tanks at Sikka Shore Terminal (SST) and one no. ammonia at Motikhavdi plant site will be installed. Details of ammonia tanks existing and proposed at the plant site and Sikka shore are as given below:

S.N.	Location	No. of Tank/Storage Capacity in MT	
		Existing	Proposed Additional
1	Plant Site	2 x 3000	1 x 10000
2	Sikka Shore Terminal	2x 10000	2 x 10000

3.0 The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 30<sup>th</sup> meeting held during 22<sup>nd</sup> -23<sup>rd</sup> December, 2014 and the Committee recommended the proposal for the following amendment:

- i) GSFC can construct ammonia tanks as per the above mentioned proposal. After installation of new ammonia tanks, the total storage capacity of ammonia will be 56000 MT and GSFC will not store ammonia more than 46000 MT in a distributed manner. It means that GSFC will not store ammonia more than 82 % of the tank capacity at any point of time. All the safety measures as per risk assessment shall be implemented.

4/3



ii) GSFC (Sikka Unit) will spend for CSR/Enterprise Social Commitment (ESC) up to 3 % of the project cost and 2 % of the average net profit of last three years as per companies act in vogue.

4.0 The Ministry accepts the recommendation of the Expert Appraisal Committee (Industry) for amendment in the existing environmental clearance subject to compliance of specific conditions and general conditions.

5.0 All other conditions will remain unchanged.

6.0 You are requested to keep this letter with the Environmental Clearance accorded vide letter No. J-11011/17/2013- IA II (I) dated 9<sup>th</sup> October, 2014.


7.0 In future, in case of change in the scope of the project, the company shall obtain fresh environmental clearance.

8.0 This issues with the prior approval of the Competent Authority.


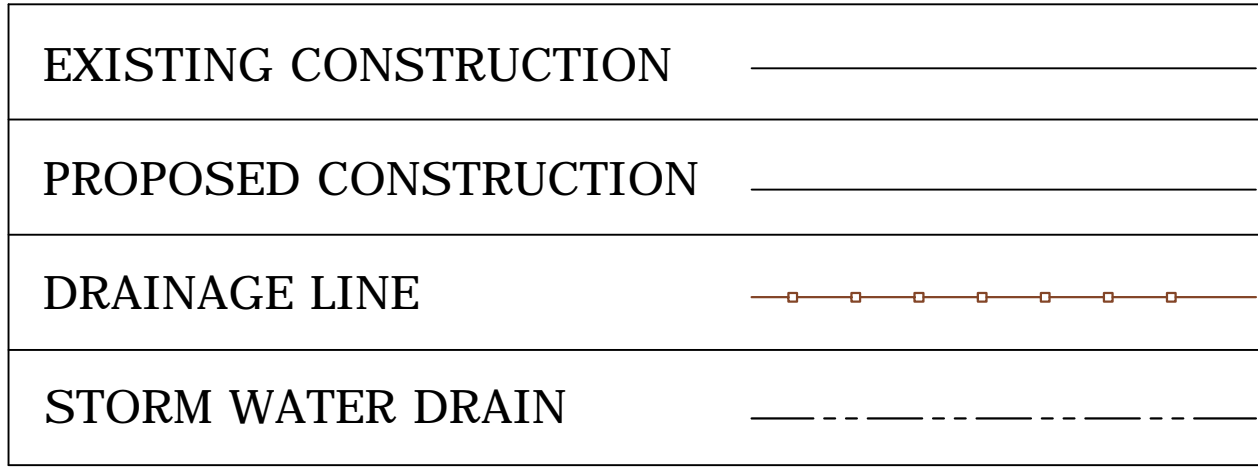
  
(Lalit Bokolia)  
Additional Director

**Copy to:-**

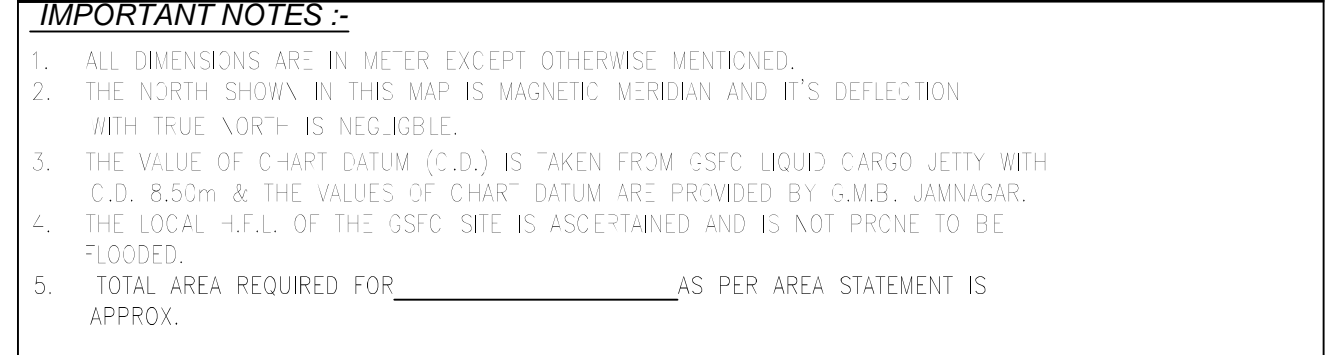
- 1.0 The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandhi Nagar - 382 010, Gujarat.
- 2.0 The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
- 3.0 The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4.0 The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
- 5.0 Monitoring Cell, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhavan, Jor Bagh, New Delhi.
- 6.0 Guard File/Monitoring File/Record File.

  
(Lalit Bokolia)  
Additional Director





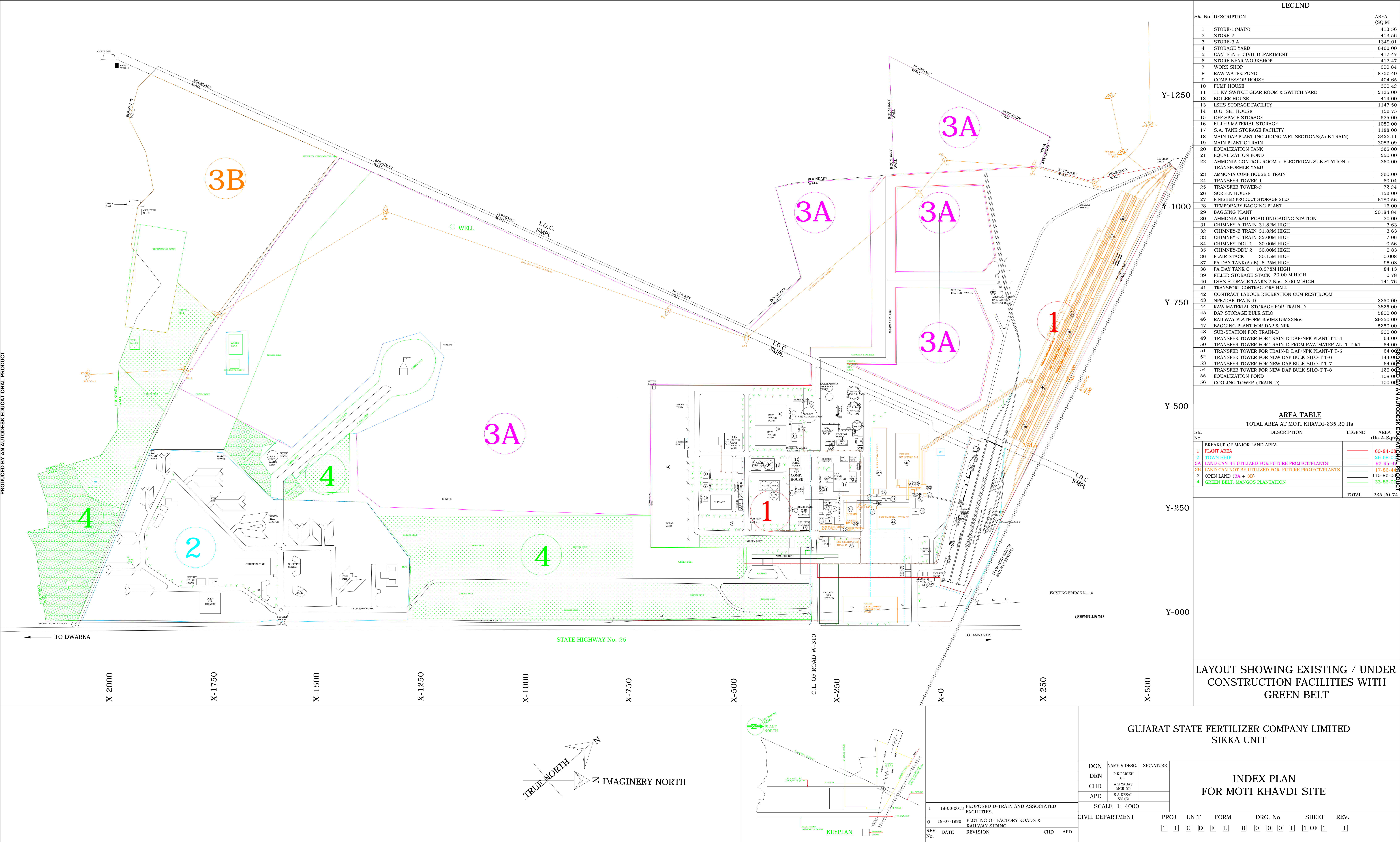
AREA TABLE		
TOTAL AREA AT SIKKA SHORE TERMINAL SITE = 67-02-78 (Ha-A-Sq)		
Sr No	DISCRIPTION	AREA (Ha-A-Sq)
	BREAK UP OF MAJOR LAND AREA	
1	OPEN LAND AT SST SITE	58-98-78
2	PLANT AREA AT SST SITE	07-70-00
3	GREEN BELT	00-34-00



# INDEX PLAN FOR SIKKA SHORE TERMINAL SITE

DGN			INDEX PLAN FOR SIKKA SHORE TERMINAL SITE														
R.DRN																	
CHD																	
APD																	
SCALE 1: 4000																	
CIVIL DEPARTMENT			PROJ.	UNIT	FORM	DRG. No.				SHEET		REV.					
			1	1	C	D	F	L	0	0	0	0	1	1	OF	1	1







**F.No. 11-90/2012-IA.III**  
**Government of India**  
**Ministry of Environment, Forests & Climate Change**  
**(IA-III Section)**

**Vayu Wing, 3<sup>rd</sup> Floor,**  
**Indira Paryavaran Bhawan,**  
**Jor Bag Road, Aliganj,**  
**New Delhi - 110 003**

Dated: 16<sup>th</sup> September, 2014

**To**

**The DGM (EC) & MR,**

M/s Gujarat State Fertilizers and Chemicals Ltd.,  
Post: Motikhavdi, Dist. Jamnagar,  
Gujarat - 361 140

**Contact Person Details:**

**Dr. GC Kamdar,**

Fax: 0288-2344034

Phone: 0288-2432270

Email: gck\_su@gsfeltd.com

**Subject: Environmental and CRZ Clearance for dredging in front of existing captive jetty near turning circle, laying of additional pipeline, and addition of Ammonia and Phosphoric Acid tanks in the existing Sikka Shore Terminal of Gulf Kachchh, Gujarat by M/s Gujarat State Fertilizers and Chemicals Ltd. - Reg.**

This has reference to your proposal forwarded by the Director (Env.) & Additional Secretary, Forests & Environment Department, Gujarat vide letter No: ENV-10-2013-93-E dated 21.02.2014 and your letter dated 21.04.2014 seeking prior Environmental and CRZ Clearance for the above project under the Environment Impact Assessment (EIA) Notification - 2006 and Coastal Regulation Zone (CRZ) Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification - 2006 and Coastal Regulation Zone Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, recommendation of State Coastal Zone Management Authority, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee (EAC) constituted by the competent authority in its meetings held on 21<sup>st</sup> - 22<sup>nd</sup> March, 2014 and 19<sup>th</sup> - 21<sup>st</sup> May, 2014.

2. It is inter-alia noted that the proposal involves dredging in front of existing captive jetty near turning circle, laying of additional pipeline, and addition of Ammonia and Phosphoric Acid tanks in the existing Sikka Shore Terminal of Gulf Kachchh, Gujarat. The jetty is located inside Sikka Creek about 3 nautical miles from the anchorage area at Latitude: 22° 27' 30" N and Longitude: 69° 47' 45" E. Being a tidal port, the berthing and de-berthing at existing jetty is done only during high tide. There is no night navigation facility. The jetty is being used for handling the import of raw materials needed for DAP production at Sikka. The draft allowable is 8m. For the import of raw materials required in keeping with



the proposed expansion of fertilizers production, it is required to dredge berthing area up to -11.70m to allow vessels up to 33,000DWT to berth. It is also required to create turning circle of 400m diameter with -8.00 m bed levels for safe maneuvering of the vessels. The proposal includes (i) dredging in berthing area and turning circle near the existing captive jetty to the tune of 2.5 lakh Cum. (ii) laying of part of Ammonia (6 inch dia. LTCS line with cold PUFF insulation) and phosphoric acid (6 inch SS 316 L) pipelines from Sikka Shore Terminal (SST) to Motikhavdi plant site located approximately 9.5 km distance and (iii) Installation of additional Ammonia and phosphoric acid storage tanks, two 10,000 MT Ammonia Tanks and three 10,000 MT Phosphoric Acid Tanks in the existing premises of SST.

3. The project was examined by the EAC in its 119<sup>th</sup> meeting held on 20<sup>th</sup> – 21<sup>st</sup> December, 2012 and finalized ToR including conduct of Public Hearing. Public Hearing conducted on 17.01.2014 at Sikka. The major issues raised during the Public Hearing were employment, transportation facility for school children maintenance of existing pipeline corridor, dredging near MNP etc. PP informed that the Notification on Eco- Sensitive Zone around MNP & Sanctuary was made on 22.08.2013. The project is outside the ESZ, however the CCF, MNP, Jamnagar vide letter dated 29.01.2014 has stipulated certain conditions.

4. The project was considered by the EAC in its 132<sup>nd</sup> meeting held in March, 2014 and the EAC noted that CRZ map does not show the details of the MNP & Sanctuary and location of dredge material dumping. Therefore the EAC suggested to the PP to submit the revised CRZ map showing all the proposed components, MNP & Sanctuary with their boundary, dredge location, dredge material disposal etc. The EAC also wanted a more positive and reassuring response on Public Hearing issues like protection of bus facility for school children and disposal of arsenic etc.

5. The Gujarat State Coastal Zone Management Authority has recommended the project vide letter No. ENV-10-2013-93-E dated 21.02.2014.

6. The details presented by the Project Proponent were examined by the EAC in its 134<sup>th</sup> meeting held on 19<sup>th</sup> - 21<sup>st</sup> May, 2014. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accords necessary Environmental and CRZ Clearance for the above project as per the provisions of Environmental Impact Assessment Notification – 2006 and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:

**7. Specific Conditions:**

- (i) Dedicated ambulance facility with notified contact details, shall be provided as committed.
- (ii) Project Proponent (PP) shall explore the possibilities for disposal of Arsenic waste in accordance with the norms and till the disposal, PP shall submit the details of storage/monitoring reports to Gujarat Pollution Control Board (GPCB) for its monitoring.

- (iii) All the conditions stipulated by Gujarat State Coastal Zone Management Authority vide their letter No. ENV-10-2013-93-E dated 21.02.2014 shall be strictly complied with.
- (iv) The smooth and safe operation of the system shall be ensured by incorporating a computerized SCADA (Supervisory Control And Data Automation) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.
- (v) The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be framed. The fishermen shall be suitably educated and informed about the traffic guidelines.
- (vi) Oil Contingency Management Plan shall be put in place.
- (vii) Necessary signages shall be installed in both English and local languages wherever the pipeline is passing.
- (viii) Soil and water samples shall be regularly monitored along the pipeline route to check the leakage/contamination, if any and shall examine if any strengthening is required.
- (ix) All the recommendation of the EIA/EMP and DMP shall be strictly complied with.
- (x) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xi) The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.
- (xii) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

**8. General Conditions:**

- (i) The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification, 2011 and the approved Coastal Zone Management Plan of Gujarat.
- (ii) In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment, Forests & Climate Change.



- (iii) This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.
- (iv) This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.
- (v) Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and Gujarat State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.

9. These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000 including the amendments and rules made thereafter.

10. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

11. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental & CRZ Clearance and copies of clearance letters are available with the Gujarat State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

12. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

13. Any appeal against this 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.

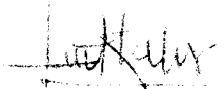
14. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

15. The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional

Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

16. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

17. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent 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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

  
**(Lalit Kapur)**  
**Director (IA-III)**


Copy to:

1. The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar.
2. The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar – 382 010.
3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhinagar-382 010.
5. The CCF, MoEF&CC, Regional Office (WR), Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal-462016 (M.P.)
6. Guard File.
7. Monitoring Cell, MoEF.

**(Lalit Kapur)**  
**Director (IA-III)**



**LIST OF IMPORTED CONTRACT EQUIPMENT**

<div> HINDUSTAN DORR-OLIVER LIMITED HINDUSTAN DORR-OLIVER LIMITED</div>							
CLIENT		GUJARAT STATE FERTILISERS & CHEMICALS LIMITED, SIKKA				ENGINEERING SPECIFICATIONS	
JOB		D-TRAIN OF NPK/DAP PLANT				PROJECT NO : MYC 120010	
D-TRAIN - EQUIPMENT LIST							
Sr No.	Item No.	Qty.	Equipment	Description	No	kW	Imported
4	DD 301	One (1)	Granulator Scrubber	Type : Venturi-Cyclonic with synthetic demister Size : Diameter (Ø) = Special Design Height (H) = Special Design MOC : GRP/SS904L Design Pressure : -0.046 kg/cm <sup>2</sup> g Design Temperature : 95 °C Design Temperature : 80 °C			Total ESPINDESA Proprietary Equipment
7	GA 302 A/B	Two (1+1)	Granulator Scrubber Pump	Type : Centrifugal Flow : 345- 414 m <sup>3</sup> /h Head : 30 mlc MOC : SS 904 Temperature (°C) : 45-95			Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

**H. M. MANKODI**  
Sd/- Mgr. (HRM & V.QC,EC) & Dy. Mgr.




## APPENDIX VII A

8	GA 303 A/B	Two (1+1)	Fluorine Scrubber Pump	Fluid	: 35-50% P <sub>2</sub> O <sub>5</sub>			
				Type	: Centrifugal			
				Flow	: 875-1050 m <sup>3</sup> /h			
				Head	: 45 mlc			
				MOC	: SS 904			Total
				Temperature (°C)	: 56			
				Fluid	: H <sub>2</sub> SiF <sub>6</sub>			
9	GA 304 A/B	Two (1+1)	Dust Scrubber Pump	Type	: Centrifugal			
				Flow	: 673-809 m <sup>3</sup> /h			
				Head	: 31 mlc			Total
				MOC	: SS 904			
				Temperature (°C)	: 76			
				Fluid	: 35-50% P <sub>2</sub> O <sub>5</sub>			
10	GA 305 A/B	Two (2)	Effluent Sump Pump	Type	: Vertical			
				Flow	: 28 m <sup>3</sup> /h			
				Head	: 21 mlc			Total
				MOC	: SS 904			
				Temperature (°C)	: 50			
				Fluid	: 0-50% P <sub>2</sub> O <sub>5</sub>			
11	GA 311	One (1)	Plant Sump Pump	Type	: Vertical			
				Flow	: 10m <sup>3</sup> /h			
				Head	: 30 mlc			
				MOC	: SS 904			Total
				Temperature (°C)	: 50-80 °C			
				Fluid	: 0-50% P <sub>2</sub> O <sub>5</sub>			

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)



# LIST OF IMPORTED CONTRACT EQUIPMENT

<div><b>DORR-OLIVER</b> HINDUSTAN DORR-OLIVER LIMITED HINDUSTAN DORR-OLIVER LIMITED</div>							
CLIENT		GUJARAT STATE FERTILISERS & CHEMICALS LIMITED, SIKKA				ENGINEERING SPECIFICATIONS	
JOB		D-TRAIN OF NPK/DAP PLANT				PROJECT NO : MYC 120010	
D-TRAIN - EQUIPMENT LIST							
Sr No.	Item No.	Qty.	Equipment	Description	No	kW	Indian
1	AG 301	One (1)	Sump Tank (with partition)	Type : Underground Size : (8m x 20m x 2m) Total Volume :300 m <sup>3</sup> MOC : RCC with PPG Lining Operating Pressure : Atm Operating Temperature : 50- 80 °C	-	-	Total
2	AG 302	One (1)	Plant Sump	Type : Underground Capacity : 6 m <sup>3</sup> Size : 2.1 m x 2.1 m x 1.5 m MOC : RCC with PPG Lining Operating Pressure : Atm Operating Temperature : 50- 80 °C	-	-	Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

H.A.

**H. M. MANKODI**  
Sr. Mgr. (HRM & V.QC,EC) & DY MGR.



## APPENDIX VII B

5	BD 301	One (1)	Stack	Type Size MOC	: Cylindrical : 3.1 m Dia (Ø) x 5 m : Above DAP/NPK Building : CSRL	-	-	Total
9	DD 302	One (1)	Dust Scrubber	Type Size MOC Design Pressure Design Temperature	: Venturi-Cyclonic with synthetic demister : Diameter (Ø) = 7200 mm : Height (H) = 15500 mm : Venturi- SS904L : Wetted part - SS 904L Balance - CSRL : 0.02 kg/cm <sup>2</sup> g : 80 °C	-	-	Total
10	DD 303	One (1)	Fluorine Scrubber	Type Size MOC Design Pressure Design Temperature	: Venturi-Cyclonic with synthetic demister : Diameter (Ø) = 7200 mm : Height (H) = 12580 mm : CSRL : 0.015 kg/cm <sup>2</sup> g : 80 °C	-	-	Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)



# APPENDIX VII B

16	FA 301	One (1)	Ammonia Scrubber Recirculation Tank	Type Size Capacity MOC Design Pressure(kg/cm <sup>2</sup> g) Design Temperature (°C)	Vertical-Cylindrical Diameter (Ø) = 3000 mm Height (H) = 3000 mm St. height 25 m <sup>3</sup> SS 904L Atm 85	-	-	Total
17	FA 302	One (1)	Fluorine Scrubber Tank	Type Size Capacity MOC Design Pressure(kg/cm <sup>2</sup> g) Design Temperature (°C)	Vertical-Cylindrical Diameter (Ø) = 3000 mm Height (H) = 3000 mm St height 25 m <sup>3</sup> CSRL Atm 80	-	-	Total
32	BC 202	One (1)	Quench Air Fan (Dilution Fan)	Type Flow Pressure Drop (ΔP) MOC Temperature (°C)	Centrifugal 5630 Nm <sup>3</sup> /h 100 mm /H <sub>2</sub> O CS 46	1	37	Total
34	FC 201	One (1) Set	Dedusting Cyclones With Flap Valve	Gas Flow (Capacity) Operating Temperature Operating Pressure	228227 m <sup>3</sup> /h 55 °C 150 mm WC	-	-	Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

**H. M. MANKODI**

Mr. M. (HRM & V.O.C.EC) & DY.M.P.



**APPENDIX VII B**

				MOC	CS			
36	FC 203	One (1) Set	FBC Cyclones With Flap Valve	Gas Flow (Capacity) Operating Temperature Operating Pressure MOC	116524 m <sup>3</sup> /h 70 °C 150 mm WC CS	-	-	Total
40	FD 204	One (1)	Air Droplets Separator	Gas Flow (Capacity) Operating Temperature MOC	118946 m <sup>3</sup> /h 20 °C CS	-	-	Total
64	PC 205	One (1)	FBC Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 5 TPH 250 mm 60 SS 304 L	1	3	Total
65	PC 206	One (1)	Dryer Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 20 TPH 400 mm 50 SS 304 L	1	11	Total
66	PC 207	One (1)	Dedust Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 33 TPH 500 mm 45 SS 304 L	1	18.5	Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)



## APPENDIX VII B

112	BD-101	One (1)	Stack	MOC Size	CS Diameter (Ø)= 750 mm, Height 5 m over Raw Material Buidling			Total	
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For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)

**H. M. MANKODI**  
Sr. Mgr. (HRM & V.QC,EC) & DY.MR.



## APPENDIX VII B

				MOC	CS			
36	FC 203	One (1) Set	FBC Cyclones With Flap Valve	Gas Flow (Capacity) Operating Temperature Operating Pressure MOC	116524 m <sup>3</sup> /h 70 °C 150 mm WC CS	-	-	Total
40	FD 204	One (1)	Air Droplets Separator	Gas Flow (Capacity) Operating Temperature MOC	118946 m <sup>3</sup> /h 20 °C CS	-	-	Total
64	PC 205	One (1)	FBC Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 5 TPH 250 mm 60 SS 304 L	1	3	Total
65	PC 206	One (1)	Dryer Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 20 TPH 400 mm 50 SS 304 L	1	11	Total
66	PC 207	One (1)	Dedust Cyclones Screw	Type Capacity Diameter (Ø) Speed (r.p.m) MOC	Screw Conveyor 33 TPH 500 mm 45 SS 304 L	1	18.5	Total

For Gujarat State Fertilizers & Chemicals Ltd.  
(Sikka Unit)





## RECITALS

A. WHEREAS, the Bulk Supplier has been established as a company wholly owned by the Government of Gujarat to inter alia engage in the laying down and subsequent management of transmission mains for transmission of water from the Sardar Sarovar Narmada Nigam Limited, water resources department or any other organisation to various bodies.

B. WHEREAS, the Purchaser is desirous of purchasing water from the Bulk Supplier and the Bulk Supplier has agreed to undertake the bulk sale of water to the Purchaser on the terms and conditions set out hereinafter in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and the sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

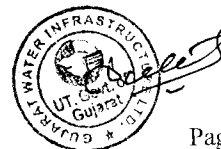
### 1. DEFINITIONS AND INTERPRETATION:

#### 1.1 Definitions:

<b>Accounting Year:</b>	Means the financial year commencing from 1 <sup>st</sup> of April of any calendar year and ending on 31 <sup>st</sup> of March of the next calendar year.
<b>Authorised Agency:</b>	shall have the meaning assigned thereto under Annexure - A.
<b>Authorised Engineer:</b>	shall have the meaning assigned thereto under Annexure - A.
<b>Authorised Representative</b>	Shall mean any person duly authorised by the Party to execute this Agreement so as to legally bind the Party to this Agreement.
<b>Change in Law:</b>	shall have the meaning assigned thereto in Article 18
<b>Dispatch Schedule Response:</b>	shall have the meaning ascribed thereto in Annexure - A.
<b>Dispatch Schedule Request:</b>	shall have the meaning ascribed thereto in Annexure - A.
<b>Dispute Resolution:</b>	Means the procedure for dispute resolution set forth in Article 17.
<b>Due Date:</b>	Shall mean the date mentioned in the invoice raised by the Bulk Supplier by which the Purchaser must pay the invoice amount to the Bulk Supplier.
<b>Document or Documentation:</b>	means documentation printed or in written form, tape, discs, drawing, computer programs, writings, reports, photographs, cassettes, or expressed in any other written, audio or visual form.
<b>Effective Date</b>	Means the date of the signing of this Agreement.
<b>Final Compliance Certificate:</b>	shall have the meaning ascribed thereto in Annexure - A.
<b>Financial Documents:</b>	Means Letter of Credit, Bank Guarantee and State Government Guarantee given by the Purchaser to the Bulk Supplier for the purpose of securing the payments to the Bulk Supplier.
<b>Force Majeure or Force Majeure Event:</b>	Shall mean an act, event, condition or occurrence specified in Clause 16.
<b>Industrial use:</b>	shall have the meaning ascribed thereto in Annexure - C.

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



<b>Interconnection Facilities:</b>	shall mean to provide bulk water & measuring facilities.
<b>Meter:</b>	shall have the meaning ascribed thereto in Annexure - A and it shall be installed at the Transfer Point.
<b>Non-Industrial Use:</b>	shall have the meaning ascribed thereto under Annexure - C.
<b>Offtake Point:</b>	means the geographical place on the Bulk Supplier's Network where the infrastructure dedicated to supplying water to the Purchaser begins.
<b>Operational Representative:</b>	shall have the meaning ascribed to it under Clause 21.4
<b>Operating Procedures:</b>	Shall have the meaning ascribed thereto in Clause 12.2
<b>Parties:</b>	means the parties to this Agreement collectively and "Party" shall mean any of the Parties to this Agreement individually.
<b>Premises:</b>	means any land or building or any part of a building.
<b>Rs. Or Rupees:</b>	means the lawful currency of the Republic of India.
<b>SBI PLR:</b>	means the prime lending rate per annum for loans with one year maturity as fixed from time to time by the State Bank of India, and in the absence of such rate, the average of the prime lending rates for loans with one year maturity fixed by the Bank of India, and failing that any other arrangement that substitutes such prime lending rate as mutually agreed between the Parties.
<b>Source:</b>	means any source of water to the Bulk Supplier.
<b>Successor Agreement:</b>	Shall have the meaning assigned to it in Clause 2.2 hereof.
<b>Tariff Category:</b>	shall have the meaning ascribed thereto under Annexure - C.
<b>Tariff Rate:</b>	shall have the meaning ascribed thereto under Annexure - C.
<b>Taxes:</b>	means any Indian taxes corporate income, sales tax, excise duties, customs duties and local taxes and any impose of like nature (whether Central, State or local) charged, levied or imposed on the goods, materials, equipment and services but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever.
<b>Term:</b>	shall have the meaning assigned to it in Clause 2.1 herein.
<b>Termination:</b>	means the expiry or termination of this Agreement in accordance with the provisions of this Agreement.
<b>Transfer Point:</b>	means the geographical place where the title to the water supplied under this Agreement transfers from the Bulk Supplier to the Purchaser.
<b>Valid Dispatch Schedule:</b>	shall have the meaning assigned to it in Annexure A.
<b>WPI:</b>	Means the wholesale price index published by the Ministry of Industry, Government of India and shall include any index, which substitutes the wholesale price index.

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



## 1.2 Interpretation:

In this Agreement, unless the context otherwise requires,

- (a) any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder.
- (b) references to Indian law shall include the laws, acts ordinances, rules, regulations, or bye laws which have the force of law in any state or union territory forming part of the Union of India;
- (c) the words importing singular shall include plural and vice-versa, and words denoting natural persons shall include partnership, firms, companies, corporations, joint ventures, trusts, associations, organisations or other entities;
- (d) the headings are for convenience for reference only and shall not be used in and shall not affect the construction or interpretation of this Agreement;
- (e) terms and words beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein and the terms and words described in the Annexure and used therein shall have the meaning ascribed thereto in the Annexures ;
- (f) the words "include" and "including" are to be construed without limitation;
- (g) references to "construction" include, unless the context otherwise requires, investigation, design, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction;
- (h) any reference to any period of time shall mean a reference to that according to Indian Standard Time;
- (i) any reference to day shall mean a reference to a calendar day, unless otherwise specified;
- (j) any reference to month shall mean a reference to a calendar month;
- (k) the Annexures to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- (l) any reference at any time to any other agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference provided that this Clause shall not operate so as to increase liabilities or obligations of the Bulk Supplier hereunder or pursuant hereto in any manner whatsoever;
- (m) references to Recitals, Articles, Clauses, Sub-clauses, Paragraphs, or Annexures in this Agreement shall, except where the context otherwise requires, be deemed to be references to Recitals, Articles, Clauses, Sub-clauses, paragraphs, and Annexures of or to this Agreement;
- (n) any agreement, consent, approval, authorisation, notice, communication, information or report required under or pursuant to this Agreement from or by any Party shall be valid and effectual only if it is in writing under the hands of duly Authorised Representative of such Party in this behalf and not otherwise;
- (o) any reference to any period commencing "from" a specified day or date and "till" or "until" a specified day or date shall include both such days or dates.

## 1.3 Measurements and Arithmetic Conventions:

All measurements and calculations shall be in metric system and calculations done to 2 decimal places, with the third digit of 5 or above being rounded up and below 5 being rounded down.

For Gujarat State Fertilizers & Chemicals Ltd.

(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



#### 1.4 Priority of contract documents and errors / discrepancies.

1.4.1. This Agreement and the various Annexures forming part of this Agreement are to be taken as mutually explanatory to one another and, unless otherwise expressly provided elsewhere in this Agreement, the priority of the following documents shall in the event of any conflict between them be in the order they are set out:

- (i) this Agreement
  - (ii) various Annexures forming part of this Agreement,
- i.e. document at (i) above shall prevail over the documents at (ii) above.

1.4.2. In case of ambiguities or discrepancies within this Agreement the following shall apply:

- (i) between two Clauses of this Agreement, the provisions of the specific clause relevant to the issue under consideration shall prevail over those in other Clauses;
- (ii) Between any value written in numerals and that in words, the latter shall prevail.

## 2. TERM OF AGREEMENT

### 2.1 Term

This Agreement shall come into force on the Effective Date and unless terminated earlier in accordance with the provisions of this Agreement, shall continue to be in force for a period of five (5) years. The renewed agreement as per earlier term shall be in force only up to 31.08.2011. These revised terms shall be applicable w.e.f. 24.01.2012

### 2.2 Renewal

This agreement shall not be automatically renewed for further period of 5 years. For renewal of agreement for further period of 5 years shall be done only on receipt of fresh application with process fees before six months from the expiry of existing agreement. If no intimation has been received, the agreement shall be cancelled without prior intimation to the purchaser. Agreement for the further period shall be done with the terms & conditions prevailing at the time of such agreement which shall be binding to the purchaser.

## 3. SALE AND PURCHASE OF WATER

3.1 It is hereby expressly agreed by and between the Parties that during the Term of this Agreement, the Bulk Supplier shall supply water to the Purchaser and the Purchaser shall purchase such water from the Bulk Supplier in accordance with the terms and conditions set out in this Agreement.

3.2 Purchaser will purchase a monthly quantity of water that equals to **minimum quantity shall be 80% of sanctioned quantity i.e. 0.80 MLD and maximum quantity shall be 110% of sanctioned quantity of water i.e. 1.10 MLD.** In case of additional requirement of water, terms may be decided mutually subject to availability of water. Purchaser has been **sanctioned to withdraw water of 1.00 MLD.**

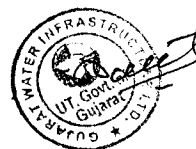
3.3 The Purchaser shall inform the Bulk Supplier of any change in the allocation of water at least one working day before the invoice for that billing cycle is due.

3.4 Notwithstanding the provision of Clause 3.2, 4.5 and 4.6 a variance between **minimum quantity shall be 80% of sanctioned quantity i.e. 0.80 MLD and maximum quantity shall be 110% of sanctioned quantity of water i.e. 1.10 MLD,** water supply will not be construed as a breach of this Agreement by the Bulk Supplier. However Supplier shall be entitled to levy additional charges for excess drawal from time to time.

3.5 If any increase in the monthly allocation of water continues for three consecutive months, the Bulk Supplier shall be at liberty to amend Clause 3.2 above on the

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKAJUNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



basis of the maximum level of consumption recorded during the previous three consecutive months.

- 3.6 The Bulk Supplier shall be entitled to recover charges in accordance with Article 7 (Tariff and Billing Process) for the supply of water to the Purchaser under this Agreement and the Purchaser shall pay such charges to the Bulk Supplier in accordance with the provisions of this Agreement.

#### 4. OBLIGATIONS OF THE BULK SUPPLIER

- 4.1 The Bulk Supplier shall provide the infrastructure required for the purpose of transmission of water from its Source until the Transfer Point within ninety (90) days of the effective Date, as confirmed by an Authorised Agency or Authorised Engineer in accordance with the procedure set out in Annexure A.

- 4.2 Deleted

- 4.3 (a) The Bulk Supplier shall notify the Purchaser four weeks prior to its undertaking any major maintenance activities of its infrastructure that may have the effect of disrupting supply of water to the Purchaser and shall as far as practicable, consult the Purchaser to determine the date and / or period of such disruption, which shall not last more than two working days unless it is beyond control of Bulk Supplier.

(b) In case of sudden failure of machinery/pipeline the Bulk supplier will inform Purchaser within 24 hours.

- 4.4 The Bulk Supplier shall commence the supply of water to the Purchaser within one (1) working day after the issuance of the Final Compliance Certificate to the Purchaser as described in Annexure - A.

- 4.5 The Bulk Supplier shall supply the quantity of water to the Purchaser as set out in a Valid Dispatch Schedule.

- 4.6 If the Purchaser fails to submit its Dispatch Schedule Request in due time to the Bulk Supplier, as described in Annexure - A, the Bulk Supplier shall make best efforts to supply water based on the supply during the preceding Dispatch Schedule Response, as described in Annexure A, and the Purchaser shall be billed for the same. Provided that in no event shall supply of water to the Purchaser under this Clause 4.6 be less than the minimum agreed upon under Clauses 3.2.

#### 5. OBLIGATIONS OF THE PURCHASER

- 5.1 The Purchaser shall, at its own cost and within ninety (90) days of the Effective Date, establish, operate and maintain all Interconnection Facilities and any and all infrastructure required to transmit water from the Transfer Point.

- 5.2 The Purchaser shall obtain its Final Compliance Certificate from the Bulk Supplier in accordance with the procedures set out in Annexure A within ninety (90) days from the effective Date.

- 5.3 The Purchaser shall be responsible for sending Dispatch Request to the Bulk Supplier in accordance with the procedures set out in Annexure A.

- 5.4 The Purchaser will be responsible for obtaining all permissions and / or approvals required for the construction, operation and maintenance of any and all Interconnection Facilities including the pumping station.

- 5.5 The Purchaser shall pay the duly sent invoices as described under Clause 8.1.

5.6 Subject to Clause 13.4 hereof, the Purchaser shall pay for the minimum quantity of water specified in Clause 3.2 or 3.3, as the case may be, irrespective of the consumption or non-consumption of the said amount of water by the Purchaser.

5.7 The Purchaser shall be solely responsible for compliance with any and all laws, regulations, directives and / or orders related to the treatment and disposal of the water supplied by the Bulk Supplier and the Bulk Supplier shall not be held responsible for any default on part of the Purchaser on this account.

5.8 The Purchaser shall ensure that all relevant and necessary documents are made available to the Bulk Supplier on the demand of the Bulk Supplier in support of the

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addl. General Manager (SU)



use of water allocated within one billing cycle to allow the Bulk Supplier to verify the accuracy of the allocation of water according to Clause 3.2.

- 5.9 The purchaser shall deposit with the bulk supplier a performance security in the form of a cash deposit non interest bearing to the Bulk Supplier, which shall be equal to **Rs.27, 00,000/- (Rupees twenty seven lacs only)** and shall be refunded to the purchaser upon termination of this Agreement, after adjustment of all dues payable to the bulk supplier by the purchaser. The amount has already received by the Bulk Supplier.

**6. METERING**

- 6.1 Meters. Purchaser shall acquire, provide, install, calibrate, control, retain ownership of and maintain the Meter along with U.P.S at the Transfer Point. The Meter shall be in compliance with accuracy standards specified in Annexure A of this Agreement.
- 6.2 Maintenance of Meter. The Meter shall be maintained by Purchaser consistent with industry standards in order to ensure that the Meter remains in compliance with the accuracy standards specified in Annexure - A. The procedures for installation, testing, repair, maintenance and operations of the Meter shall be consistent with industry standards.
- 6.3 Reading, Inspection, Calibration & Maintenance. The Meter shall be jointly read, calibrated, inspected and sealed on behalf of both the Parties. Either Party may request re-calibration of the Meter by giving notice of the same to the other Party. Within twenty-four (24) hours of receipt of such notice the Parties shall ensure that the Meter is jointly opened, re-calibrated, inspected and sealed. In the event that either Party is not present to jointly read or re-calibrate the Meter, the other Party shall be entitled to proceed to read or re-calibrate the Meter on its own.
- 6.4 Meter Readings. The Meter shall be read daily for the purpose of determining the deliveries of water during the immediately preceding month. Meter readings shall be taken in the presence of the Operational Representative of each Party and shall be jointly taken and recorded.
- 6.5 Bulk Supplier's Access and Right of Inspection: Bulk Supplier shall have the right to designate, from time to time, by a written notice to Purchaser, up to five (5) of its employees who shall be entitled to inspect the Meters at the Transfer Points for verifying Purchaser's compliance with this Agreement. Subject to their complying with all reasonable safety precautions and standards, Purchaser shall provide these employees of Bulk Supplier access to the Meters:
- (a) Normally after receiving not less than 2 days notice of inspection from Bulk Supplier; and
  - (b) On occasions where Purchaser has reported a Force Majeure Event or to verify significant causes for reduced delivery of water after receiving one (1) hour's notice from Bulk Supplier.

In the exercise of any of its rights to access and inspection, Bulk Supplier shall ensure that its employees do not knowingly interfere with the proper operation or maintenance of the Meters of the Purchaser.

- 6.6 Notice of Metering Defects. If at any time either Party feels that a Meter is not recording correctly, it shall give notice to the other Party. Purchaser shall then undertake testing and calibration of the Meter owned by Purchaser and located at Transfer Point in co-ordination with and in the presence of the Operational Representative of the Bulk Supplier. If after such testing the error is found to exceed the prescribed limits for that class of Meters, necessary adjustment in the bills shall be made from the date of notice or from such other date as can be satisfactorily established for such adjustment.

- 6.7 Metering failure. If the Meter fails to record, then the amount of water supplied will be computed on the basis of the billing for the average of the billing cycle for the same duration of the previous year. Adequate metering failure

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



alarm/annunciation shall be provided by the Purchaser to alert the Operational Representative on duty, to take corrective action and record the time of failure of relay. However, if any such failure in Metering occurs within twelve (12) months from the date of first supply by the Bulk Supplier, the amount of water supplied will be computed on the basis of the maximum amount of water to be supplied in the relevant billing cycle.

- 6.8 Disputes. Any unresolved disputes between the Parties related to the accuracy of any Meter readings shall be in accordance with Article 17 (Dispute Resolution).

**7. TARIFF AND BILLING PROCESS**

- 7.1 The Bulk Supplier shall be entitled to charge the Purchaser for supply of water under this Agreement at a Tariff Rate calculated in accordance with the method set out in Annexure - C.

- 7.2 The charges for the water supplied under the terms of this Agreement shall be exclusive of any sales tax currently in force and any other levy imposed by the government / local authorities pursuant to any Change of Law as determined under Article 18, and any such taxes shall be borne by the Purchaser over and above the aforesaid price.

- 7.3 Unless the Bulk Supplier fails to provide its infrastructure as described in Clause 5.1, the Purchaser shall receive its first invoice from the Bulk Supplier within seven (7) days after

the issuance of the Final Compliance Certificate but no later than ninety (90) days from the Effective Date, regardless of not having obtained the Final Compliance Certificate from the Bulk Supplier as described in Annexure - A.

- 7.4 The Tariff Rate agreed upon by the Parties may be reviewed on the occurrence of
- (i) any Force Majeure event as described under Clause 16.1; or
  - (ii) any Change of Law as described under Article 18; or
  - (iii) any necessary review of the components of the Tariff Rate in accordance with Annexure - C; or
  - (iv) or any event or circumstance of a nature analogous to any of the foregoing as shall be deemed necessary by the Parties.

- 7.5 Other than in the case of the first invoice as described in Clause 7.3, the Bulk Supplier will send a duly addressed monthly invoice to the Purchaser, to the address provided by the Purchaser under Clause 19.2, by registered post and by courier, by the seventh day of every English calendar month for the previous calendar month. Each invoice shall set out the following:

- (i) Measured volume of water delivered to the Purchaser during the relevant billing period;
- (ii) Any adjustments made and the method of making such adjustments; and
- (iii) Amounts payable by the Purchaser.

- 7.6 Any invoice addressed to the Purchaser shall be construed as a notice to pay the bill.

- 7.7 The Purchaser shall upon receipt of the invoice from the Bulk Supplier pay to the Bulk Supplier the entire amount due, by way of a cheque issued by a nationalised/scheduled bank located in Gujarat acceptable to the Bulk Supplier.

- 7.8 In the event that the Bulk Supplier fails to raise the invoice for any one or more monthly billing cycles, the same shall be added to the subsequent invoices.

- 7.9 During the pendency of any billing dispute(s) the Purchaser cannot take recourse to non-payment of the disputed bill and / or any subsequent bills.

- 7.10 In the event the Purchaser is due for any refund of any amount, due to any reason whatsoever, the Bulk Supplier shall make suitable adjustments against the amounts

For Gujarat State Fertilizers & Chemicals Ltd.

(SIKKA UNIT)

**D. R. DAVE**

Addl. General Manager (SU)





due to the Bulk Supplier from the Purchaser for the following monthly billing cycle(s).

- 7.11 In the event, if the purchaser do not start drawing water on or before 90 days from the date of agreement or effective date of agreement, then billing will be started and applicable from 91st day for the minimum quantity of water as specified in clause 3.2 of the agreement. However as decided vide letter no. GWIL/1223/GSFCL/492/2014, dt.11/02/2014, the necessary infrastructure for withdrawing water shall be completed in all respect as per planning and GSFCL to withdraw water latest by dt.01.04.2015 and billing as per agreement will start also from same date i.e. dt.01.04.2015 (Copy of letter attached). In any case, after starting of water, if minimum quantity of water is not drawn, the billing will be done and payable by the purchaser for minimum quantity of water. Similarly penalty / additional charges for excessive quantity drawn beyond maximum quantity of water as specified in clause 3.2 of this agreement shall also be applicable.

## 8. PAYMENT AND SURCHARGE.

- 8.1 Due Date of Payment. Invoices given by the Bulk Supplier shall be due and payable by Purchaser to the Bulk Supplier not later than fourteen (14) days after the date of the Invoice.

Payment shall be made to the credit of one or more bank accounts designated by the Bulk Supplier to the Purchaser in a written notice delivered in accordance with Article 21 (Notice). Notwithstanding the existence of any dispute whatsoever regarding the invoice, and subject to resolution of the disputed amount objection in terms of Article 17 (Dispute Resolution), the Purchaser shall pay to the Bulk Supplier the full amount of the Invoice on the due date of payment.

- 8.2 In the event the invoice amount is not paid by the Purchaser by the Due Date, the Purchaser shall pay a penalty equal to interest at the rate of 15% (fifteen per cent) per annum from the Due Date until the date on which the Bulk Supplier receives the payment of the invoice amount from the Purchaser.

- 8.3 Payment Process.

- 8.3.1 *Endorsement.* Within three (3) business days from the date of delivery of the Invoice, the Purchaser shall return to the Bulk Supplier one copy of the Invoice duly endorsed with its approval.

- 8.3.2 *Disputed Amount Objection.* If the Purchaser disputes any portion of the Invoice amount, within ten (10) business days from the date of issuance of the Invoice, the Purchaser shall return to the Bulk Supplier one copy of the Invoice duly endorsed recording the disputed amount and the accepted amount, accompanied by a written objection giving particulars of the item disputed with full details, supporting data, and reasons for the dispute, and the amount disputed against each item.

- 8.3.3 *Deemed Endorsement.* In the event that the Purchaser fails to act in accordance with Sub-clauses 8.3.1 or 8.3.2 above, the Invoice shall be deemed to be duly endorsed for the full amount by the Purchaser for the purposes of payment.

- 8.3.4 *Dispute Resolution & Payment.* The Parties shall endeavor to resolve any disputed amount objection raised, in terms of sub-clause 8.3.2 within three (3) working days of the receipt of objection. Based on such resolution, the final / settled amount (as opposed to the Invoice amount) shall be paid in full settlement of the Invoice within the next four (4) working days.

- 8.4 Subsequent Settlement of Disputed Amount Objection.

- 8.4.1 *Resolution of Outstanding Dispute.* In the eventuality that the disputed amount objection is not resolved within the stipulated time frame under Sub-clause 8.3.4, subject to the requirement of payment of the full amount under Sub-Clause 8.3.1 on the due date of payment, the outstanding dispute shall be resolved in accordance with the Article 17 (Dispute Resolution).

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



8.4.2 *Consequential Payment.* When the disputed amount objection is resolved in terms of Clause 8.4.1, any additional payments determined to be due and owing to a Party shall be paid by the other Party along with a suitable compensation being:

- (a) In case of payment by the Purchaser to the Bulk Supplier, a delayed payment charge calculated in accordance with Clause 8.2; or
- (b) In case of payment by the Bulk Supplier to the Purchaser, interest calculated at the [bank rate] interest rate, computed on a daily basis, for the period of overpayment.

## 9. STANDARDS

9.1 The Bulk Supplier shall supply raw water, which is available at source of pumping.

## 10. REPRESENTATIONS AND WARRANTIES

10.1 Each Party represents and warrants to the other Party that:

- (i) It is duly organised, validly existing and in good standing under the laws of the jurisdiction of its incorporation;
- (ii) It has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (iii) It has taken all necessary corporate and other action under any applicable laws and its constitutional documents to authorise the execution, delivery and performance of this Agreement.
- (iv) All corporate actions on the part of its officers and directors necessary for the authorisation, execution and delivery of this Agreement by it and for the performance of all of its obligations hereunder have been taken.
- (v) This Agreement constitutes valid, legally binding and enforceable obligations of such Party.
- (vi) It shall not take any action or cause any person to take any act on behalf of the other Party or binding upon the other Party, except with the other Party's specific consent in writing.
- (vii) It shall take such further acts, execute and deliver such further instruments and documents, and generally do all such other things as may be reasonably necessary to accomplish the transactions contemplated in this Agreement.
- (viii) Execution, delivery or performance of this Agreement by it does not and will not conflict with, or result in a default, right to accelerate or loss of rights under, or result in the creation of any lien, charge or encumbrance, pursuant to its memorandum and articles of association, or any agreement or other document, law, rule, regulation, order, judgement or decree to which its is a party or by which it may be bound or affected.

## 11. JOINT OBLIGATIONS

11.1 Each Party shall co-operate and liaise fully with the other Party to ensure that this Agreement is implemented effectively.

11.2 Each Party shall comply with all laws relevant to the subject matter of this Agreement.

11.3 The Parties, may, from time to time, through their Authorised Representatives, agree upon and adopt a written protocol for the performance by either or both the Parties of any obligation under this Agreement. However, to the extent of any inconsistency between them, the provisions of this Agreement shall at all times prevail over any protocol adopted.

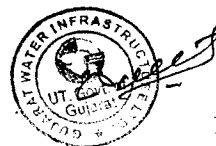
11.4 The Parties shall liaise fully, inter alia:

- (i) to resolve any difficulties which may arise in implementing this Agreement because of any legal and / or regulatory right or obligation of a Party which may conflict with this Agreement;

For Gujarat State Fertilizers & Chemicals Ltd.

(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



- (ii) to allow each Party to comply with its statutory and contractual rights and obligations to other persons; and
- (iii) to minimise any risks to persons, equipment or the environment which may arise in supplying water under this Agreement.

## 12. CO-ORDINATING COMMITTEE

- 12.1 Establishing the Co-ordinating Committee. Promptly after the execution of this Agreement, but not later than thirty (30) days thereof, the Parties shall establish a Co-ordinating Committee comprising three (3) members each nominated by the Bulk Supplier and the Purchaser. The removal, replacement, re-nomination and filling of the vacancies in the Co-ordinating Committee shall vest in the nominating Party.
- 12.2 Operating Procedures. The Co-ordinating Committee shall within 60 days of its being appointed establish protocols, procedures and standard operating practices which will govern the Parties in the control, operation and maintenance of supply facilities and interconnections, and other aspects of supply of water under this Agreement ("Operating Procedures"). These shall include:
  - (a) Operations and maintenance, including communication system;
  - (b) Commissioning procedures, where applicable;
  - (c) Handling of issues related to or arising out of Force Majeure Events and other similar events;
  - (e) Safety and protection measures, handling of emergencies including the occurrence of a flood or drought, contingency planning and incident reporting;
  - (f) Any other issues jointly referred by the Parties.

The Operating Procedures so established shall be subject to and consistent with (i) the terms and conditions of this Agreement, (ii) prudent industry practices; and (iii) the applicable laws.

- 12.3 Amendments to Operating Procedures. As an on-going exercise, the Co-ordinating Committee may, either to address any problem being faced or any request of either Party, review and/or amend the Operating Procedures from time to time. Either Party may propose amendments to the Operating Procedures by giving written notice to the other Party along with the reasons for the proposed amendment. The Operating Procedures shall take effect on the date stipulated by the Co-ordination Committee.
- 12.4 Obligation to Comply with Operating Procedures. The Operating Procedures established by the Co-ordination Committee in terms of this Agreement shall be binding on the Parties.
- 12.5 Functioning of the Co-ordinating Committee. The Co-ordinating Committee shall establish its own procedures and conduct its business accordingly. The issues pending before the Co-ordinating Committee will be decided by majority vote. Any undecided issues, shall be referred

for consideration and resolution by the Chief Executive Officers/Managing Directors of the Parties. Any issue so referred shall be decided within thirty (30) days of the reference, failing which it shall become a Dispute within the meaning of Article 17 (Dispute Resolution) hereof and shall be finally decided/settled in accordance with Article 17.

- 12.6 Subject to conformity with the applicable Law and the provisions of this Agreement, decisions of the Co-ordinating Committee shall be binding on the Parties.

## 13. DEFAULT AND PENALTIES

- 13.1 In the event that the Purchaser fails to obtain its Final Compliance Certificate within time period set out in Clause 5.2 above, the first invoice to be paid as

For Gujarat State Fertilizers & Chemicals Ltd.

(SIKKA UNIT)

**D. R. DAVE**

Addnl. General Manager (SU)



described in Clause 7.3 and any invoice thereafter until the Final Compliance Certificate is obtained, shall be equal to the Fixed Component element of the Tariff Rate as described under Annexure – C.

- 13.2 In the event the Bulk Supplier fails to provide the infrastructure required for the purpose of transmission of water from its Source until the Transfer Point in the time determined in Clause 4.1, the Purchaser shall be entitled to claim a monthly penalty equal to the Fixed Component element of the Tariff Rate as described in Annexure - C.
- 13.3 In the event of overdrawl of water, that is when the Purchaser shall off-take more water than the quantity approved of by the Bulk Supplier in its Dispatch Schedule Response as described in Annexure – A, the Purchaser shall pay the Bulk Supplier for the additional quantity of water at twice the Tariff Rate and also the tax as applicable on this additional quantity.
- 13.4 In the event the Bulk Supplier is unable to supply the minimum quantity of water as set out in Clause 3.2 to the Purchaser, the Purchaser shall be given the choice to either:
- (i) receive free of cost within the following four (4) consecutive billing cycles after the occurrence of the non-supply, a quantity of water that equals the difference between the minimum quantity of water that should have been supplied by the Bulk Supplier as determined in Clause 3.2 and the actual amount supplied, or
  - (ii) receive a credit from the Bulk Supplier in the fifth consecutive billing cycle equal to the billing amount that would have applied if the minimum quantity of water would have been supplied.
- 13.5 If the Purchaser increases the monthly allocation of the water purchased from the Bulk Supplier beyond maximum quantity specified in Clause 3.4, the Purchaser shall pay the Bulk Supplier for the undisclosed allocated quantity at twice the Tariff Rate as applicable to Industrial Use that would have been applicable had the Purchaser duly informed the Bulk Supplier thereof, and all applicable taxes.

#### 14. RIGHT OF THE BULK SUPPLIER TO DISCONNECT

- 14.1 Upon written notice to the Purchaser of no less than seven (7) days, setting out the reasons of its decision to disconnect the Purchaser in the notice, including proof thereof from the Authorised Representative of the Bulk Supplier, the Authorised Engineer or the Authorised Agency as shall be applicable and necessary, the Bulk Supplier shall be entitled to cease supply of water to the Purchaser upon the occurrence of any of the following events:
- (i) If the Purchaser fails to pay three (3) consecutive bills.
  - (ii) If any defects in the Purchaser's Interconnection Facilities or pipeline or infrastructure are likely to cause damage or loss to the Bulk Supplier or are causing damage or loss to the Bulk Supplier, as assessed by any of the Authorised Agencies or Authorised Engineers listed in Annexure A, in case of non communication by the Purchaser of such defects in the Purchaser's pipeline or infrastructure.
  - (iii) If the Purchaser refuses to provide access to the Transfer Point to the Operational Representatives, Authorised Engineer, Authorised Representative of the Bulk Supplier or any other person authorised in writing by the Bulk Supplier to that effect.
  - (iv) If it is found that the Purchaser has tampered with the Meter or an attempt has been made to tamper the Meter as assessed by any of the Authorised Agencies or Authorised Engineers listed in Annexure-A.
  - (v) If it is found that the Purchaser made and attempt to obtain the water supply directly from the system of the Bulk Supplier by bypassing the Meter as assessed by any of the Authorised Agencies or Authorised Engineers listed in Annexure A.

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



- (vi) Any cancellation of a Financial Document;
- (vii) The liquidation, insolvency, and / or bankruptcy of the Purchaser.

14.2 The Bulk Supplier shall resume supply of water to the Purchaser to its network after the satisfactory remedial by the Purchaser of the cause of the disconnection, as shall be assessed by the Authorised Engineer or the Authorised Agency as shall be applicable and necessary, and upon the payment of a fee of Rs. 25,000/-

## 15. TERMINATION

15.1 This Agreement shall expire by efflux of time as set out in Article 2 (Term of Agreement).

15.2 In the event of occurrence of one or a combination of the events of default as set herein under the Article 13 (Default and Penalties) on the part of the Purchaser and that has not been remedied for a period of more than ninety (90) days, the Bulk Supplier shall have the right to terminate the Agreement forthwith by giving a written notice for the purpose of termination. The Termination Notice shall duly state the default(s) committed by the Purchaser.

15.3 In the event of occurrence of one or a combination of the events of defaults as set out hereunder in this Clause 15.3 on the part of the Bulk Supplier and that has not been remedied for a period of more than thirty (30) days, the Purchaser shall have the right to terminate the Agreement by giving a written notice for the purpose of termination. The Termination Notice shall duly state the default(s) committed by the Bulk Supplier.

- (i) The non-supply of the minimum quantity of water as determined in Clause 3.2
- (ii) The failure to honour four (4) consecutive valid Dispatch Schedules that had been approved by the Bulk Supplier in its Dispatch Schedule Responses, as described in Annexure – A;
- (iii) The tampering with the interconnection facilities, including the Meter; and / or
- (iv) The liquidation/ insolvency/ bankruptcy of the Bulk Supplier;

15.4 Deleted

15.5 Deleted

15.6 Purchaser shall have the right to terminate this Agreement without assigning any reason whatsoever, by giving an advance written notice of six (6) months to the Bulk Supplier. In such an event the Purchaser shall pay to the Bulk Supplier an Early Termination Compensation that will cover all infrastructure costs incurred by the Bulk Supplier specifically developed for the purposes of this Agreement and a penalty as interest at the rate of SBI PLR calculated over a period of ten (10) years. Such an Early Termination Compensation shall be reduced proportionately if the Bulk Supplier also uses the infrastructure for the transmission of water to any other party on the date of termination of this Agreement.

15.7 In the event that a Force Majeure event continues for period of no less than one hundred and eighty (180) days, then either Party shall be entitled to terminate this Agreement on issuing termination notice to the other Party mentioning the reason for termination of the agreement. On such grounds for termination, cost of the parties shall be borne by themselves.

15.8 There shall be no obligation on either Party after the expiration of the Agreement or the termination of the Agreement, except in relation to the undischarged liabilities in existence.

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



## 16. FORCE MAJEURE

- 16.1 Force Majeure for the purpose of this Agreement shall mean any act or event listed below that occurs in India which will prevent the Party that claims the Force Majeure (the "Affected Party") from performing its obligations under this Agreement as specified under Clause 16.3, and which act or event shall include but shall not be limited to:
- (i) Act of God;
  - (ii) Radioactive contamination or ionising radiation;
  - (iii) Strikes or boycotts, other than those involving the Parties or their respective employees/representatives or attributable to any act or omission of any of them, to the extent that the Affected Party is unable, wholly or in part, to carry out its obligations under this Agreement for a period exceeding a continuous period of seven (7) days;
  - (iv) Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, terrorism, exercise of military power, riot, insurrection, terrorist or military action, civil commotion, politically motivated sabotage, public agitation to the extent that the Affected Party is unable, wholly or in part, to carry out its obligations under this Agreement for a period exceeding a continuous period of seven (7) days;
  - (v) National, regional, city-wide or industry-wide strikes or industrial action, to the extent that the Affected Party is unable, wholly or in part, to carry out its obligations under this Agreement for a period exceeding a continuous period of seven (7) days;
  - (vi) Any Change in Law, which has a material adverse effect on the Parties hereto and that is not covered by Article 18;
  - (vii) The expropriation, requisition, confiscation or nationalisation by a Government Authority of the infrastructure facilities or any other part thereof;
  - (viii) Any event or circumstance of a nature analogous to any of the foregoing.
- 16.2 The Affected Party shall convey the Force Majeure to the Authorised Representative of the other Party by means of wireless or telephone communication immediately on becoming aware of the Force Majeure situation. This shall be followed by a written notice by the Affected Party to the other Party within one (1) working day of becoming aware of such a situation. The Affected Party would serve weekly updates on the situation to the other Party until remedied. Any such notice and update shall as far as possible include full particulars of the nature and extent of the Force Majeure Event, the estimated duration and effect or probable effect which the Force Majeure Event is having on the Affected Party's performance of its obligations under this Agreement, the measures which the Affected Party is taking or will take to alleviate the impact of the Force Majeure Event and any other relevant information.
- 16.3 Either Party shall be entitled to suspend performance of its obligations under this Agreement, except for the payment obligations under Articles 7 (Tariff and Billing Process) and 8 (Payment and Surcharge), to the extent that such Party is unable, wholly or in part, to carry out its obligations under this Agreement due to an event of Force Majeure. In any event a Force Majeure cannot be a cause for the Purchaser to refrain from paying or delaying the payment of the bills to the Bulk Supplier for the water supplied according to the Dispatch Schedules, as described in Annexure - A.
- 16.4 The costs arising out of the subsistence of a Force Majeure Event shall be borne by the Parties and neither Party shall be required to pay to the other Party any costs arising out of any such Force Majeure Event.
- 16.5 In case of delayed information to the other Party, any loss or damages that takes place to the other Party / Parties shall be fully compensated for such loss or damage

For Gujarat State Fertilizers & Chemicals Ltd.

(SIKKA UNIT)

D. R. DAVE

Adm. General Manager (SU)



by the Party, which delayed information default on satisfaction of such damages or loss.

- 16.6 If any event of Force Majeure shall prevent a Party's performance for longer than thirty (30) consecutive days from the date of the commencement of such event of Force Majeure, the Parties shall mutually decide on either the terms of this Agreement upon which to continue this Agreement or to terminate this Agreement. If the Parties are unable to agree on such terms or to terminate this Agreement by mutual agreement within one hundred and eighty (180) days of the date of commencement of such Force Majeure, either Party may then in its sole discretion terminate this Agreement by written notice to the other Party as under Clause 15.7 above.

## 17. DISPUTE RESOLUTION

### 17.1 Amicable Resolution:

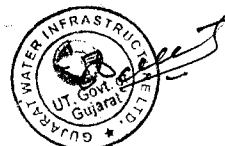
- (i) Save where expressly stated to the contrary in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to this Agreement between the Parties and so notified in writing by either Party to the other (the "Dispute") in the first instance shall be attempted to be resolved amicably in accordance with the procedures set forth in Sub-clauses (ii), (iii) and (iv) below.
- (ii) In the event of any Dispute between the Parties, either Party may require such Dispute to be referred to the Authorised Representatives of both Parties, and the two Parties shall meet within a period of seven (7) days of the date of such request to discuss and attempt to resolve the Dispute amicably. If such Dispute is not resolved by the efforts of the parties within fifteen (15) days, either Party may refer the dispute to a conciliator in accordance with the provisions of Sub-clause (iii).
- (iii) The Parties shall agree on a sole conciliator, unless the Parties agree that there shall be two or three conciliators, which shall assist the Parties in an independent and impartial manner in their attempt to reach an amicable settlement of their Dispute. Such conciliation shall be subject to the provisions of the Arbitration and Conciliation Act, 1996.
- (iv) The settlement agreement shall have the same status and effect as if it is an arbitral award on agreed terms on the substance of the dispute rendered by an arbitral tribunal.
- (v) The venue of such conciliation shall be Gandhinagar, Gujarat and the language for such conciliation shall be English.
- (vi) The Parties shall not initiate, during the conciliation proceedings, any arbitral proceedings in respect of a Dispute that is the subject matter of the conciliation proceedings, except where in the opinion of the Party such proceedings are necessary for preserving its rights.

### 17.2. Arbitration

- (i) Any Dispute, which is not resolved amicably as provided in Clause 17.1 within a period of forty-five (45) days from the date on which one Party notified the other Party of the Dispute, shall be finally decided by reference to arbitration by sole Arbitrator appointed pursuant to paragraph (ii) below. Such arbitration shall be subject to the provisions of the Arbitration and Conciliation Act, 1996.
- (ii) The name of sole Arbitrator shall be decided mutually by both parties within period of 60 days from the date of notice as per clause no (i) of clause no 17.2 However, if both the parties fail to arrive at the consent for the name of arbitrator then the matter should be referred to high court of Gujarat who shall appoint Arbitrator.
- (iii) The reasoned award of Arbitrator shall be final and binding to both the parties.

For Gujarat State Fertilizers & Chemicals Ltd  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



- (iv) The venue of such arbitration shall be Gandhinagar, Gujarat and the language of such arbitration shall be English.

**18. CHANGE IN LAW:**

18.1 Change of Law means the occurrence of any of the following after the date of this Agreement:

- (i) the enactment of any new Indian law;
- (ii) the repeal, modification or re-enactment of any existing Indian law;
- (iii) the commencement of any Indian law which has not entered into effect until the date of this Agreement;
- (iv) a change in the interpretation of application of any Indian law by a court of record as compared to such interpretation or application by a court of record prior to the date of this Agreement; or
- (v) any change in the rates of any of the Taxes, cess or levies.

18.2 Notwithstanding anything to the contrary contained in this Agreement, the Bulk Supplier shall not be liable to reimburse the Purchaser any sums on account of any change in Taxes.

**19. GOVERNING LAW AND JURISDICTION:**

19.1 This Agreement shall be construed and interpreted in accordance with and governed by the laws of India and the Courts at Gandhinagar shall have jurisdiction over all matters arising out of or relating to this Agreement.

**20. WAIVER:**

20.1 Waiver by either Party of any default by the other Party in the observance and performance of any provision or obligation under this Agreement:

- (i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligation under this Agreement;
- (ii) shall not be effective unless it is in writing and executed by a duly Authorised Representative of the Party; and
- (iii) shall not affect the validity or enforceability of this Agreement in any manner.

20.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or accepted of any variation or the relinquishment of any such right hereunder.

20.3 This Agreement and the Annexures together constitute a complete and exclusive statement of the terms of the Agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless expressly previously approved in writing by the Parties and executed by their Authorised Representatives.

**21. NOTICES AND DOCUMENTATION:**

21.1 Any notice or other communication to be given by a Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall:

- (i) be by registered post and by courier;
- (ii) copies of all notices shall also be sent to the Authorised Representatives of the Parties, except bills.
- (iii) bills shall be sent to the Purchaser by the Bulk Supplier by registered post and by courier.

For Gujarat State Fertilizers & Chemicals Ltd

(SIKKA UNIT)

**D. R. DAVE**

Addnl. General Manager (SU)





21.2 All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language. The addresses of the Parties, unless changed by written notification will be as follows:

- (i) **Gujarat Water Infrastructure Limited, Sec-10A, Block no. 1, 1<sup>st</sup> floor, Dr. Jivraj Mehta Bhavan, Gandhinagar – 382 010 (Gujarat)**
- (ii) **Gujarat State Fertilizers & Chemicals Limited, Sikka unit, Village: Moti Khavdi -361 140, Ta./Dist.: Jamnagar,**

21.3 Unless otherwise expressly provided in this Agreement any Documentation required to be provided or furnished by the Purchaser to the Bulk Supplier shall be provided free of cost and in three copies and if the Bulk Supplier is required to return any such Documentation with its approval, the Bulk Supplier shall be entitled to retain two copies thereof.

21.4 Each Party shall appoint upon the execution of this Agreement and keep appointed for the Term of the Agreement, a representative for purposes of this Agreement ("Operational Representative") and shall give the other Party notice of the name, postal address, email address, telephone and fax numbers and other contact details of such Operational Representative.

## **22. CONFIDENTIALITY**

22.1 The Parties may disclose to each other certain information in written or other tangible form that may be of a proprietary nature and such information which is disclosed verbally shall be summarised in writing by the disclosing Party within thirty (30) days of the original disclosure date. The disclosing Party shall mark such information with a proprietary notice and such information shall not be disclosed to third persons other than with the prior written consent of the other Party, which consent shall not be unreasonably withheld. Further, the terms of this Agreement and all information obtained in connection with its fulfilment shall be the exclusive property of the Parties and not disclosed to third persons other than by the prior written consent of the other Party, which consent shall not be unreasonably withheld.

22.2 The consent required under Clause 22.1 shall not apply to disclosure:

- (i) to an affiliate, consultant, contractor or subcontractor on a good faith "need-to-know" basis;
- (ii) to potential third person purchasers of the Shares of either Party, on a confidential basis; or
- (iii) to a governmental agency or entity, or to the public if such disclosure is necessary under the relevant laws or regulations or having received advice from its legal counsel that such disclosure is necessary or strongly recommended, or if the disclosing Party sincerely believes that such disclosure is necessary for some other reason;

22.3 In all such cases where disclosure is made under Clause 22.2, the disclosing Party shall give written notice to the other Party prior to making such disclosure. As to the disclosure referred to in Clause 22.2 (i) or (ii), only confidential information regarding which the third person has the legitimate need to know may be disclosed.

22.4 Any information disclosed under this Agreement shall not be deemed to be confidential or proprietary and the receiving Party shall have no obligation with respect to any such information which:

- i. was known to the receiving Party at the time it was submitted; or
- ii. is, or becomes, publicly known through no wrongful act of the receiving Party, or any affiliate, agent or consultant or employee; or
- iii. is received by the receiving Party from a third person without similar restrictions and without breach of this Agreement; or

For Gujarat State Fertilizers & Chemicals Ltd  
(SIKKA UNIT)

**D. R. DAVE**  
Addnl. General Manager (SU)



- iv. is approved for release by written authorisation of the disclosing Party; or
- v. is shown to have been independently developed by the receiving Party without the use of the information disclosed by the other Party hereunder, or
- vi. is furnished by the disclosing Party to a third person without a similar restriction on the third person's rights.

22.5 The provisions of this Article 22 shall apply throughout the term of this Agreement and for three years following its termination.

**23. SEVERABILITY:**

23.1.1. If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to Dispute Resolution under this Agreement or otherwise.

24. Deleted

**25. RELATIONSHIP BETWEEN THE PARTIES:**

25.1 This Agreement is a Principle to Principle agreement and nothing contained in this Agreement shall be construed or interpreted as constituting a partnership or agency between the Parties. Neither Party shall have any authority to bind the other Party in any manner whatsoever.

**26. ASSIGNMENT:**

26.1. The Purchaser shall not assign any part of its rights or obligations under this Agreement to any third party without the prior approval of the Bulk Supplier in writing.

26.2 In case the Purchaser desires to assign its rights under this Agreement, the Assignee should give a separate bank guarantee or any other additional security as may be required by the Bulk Supplier.

**27. SUBCONTRACTING:**

27.1 In case any of the Parties to this Agreement subcontracts any of its obligations under this Agreement, it shall be the sole responsibility of the Subcontracting Party and they shall be held responsible for any activities and the impacts of the activities undertaken by these subcontractors.

**28. RECOVERY:**

28.1.1 All sums and amounts due and payable under this Agreement shall be recoverable as per the law of the land.

**29. ADDITIONAL CONDITIONS:**

29.1 Notwithstanding anything contained herein above, the Purchaser agrees and undertakes:

- a. that Purchaser knows that the water is being drawn from longer distance and hence shall not raise any objection for irregular supply by the Supplier nor shall make any claim in this regard.
- b. that Purchaser knows that the drinking water has got priority over the water for industrial use and in view of this Purchaser shall have no objection to accept less quantity of water then the agreed quantity as may be decided by the Supplier.

- c. that the Purchaser shall not use underground water for its requirement and understand that failure to do that shall make the Purchaser liable for termination of this agreement without cost & consequences.
- 30 Any modification or amendment suggested by State Government shall be applicable and accordingly the agreement shall be revised as per suggestion or direction of the State Government from time to time.

**31. COUNTERPARTS:**

- 30.1 This Agreement may be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Agreement.

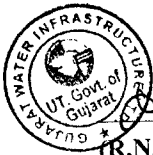
**IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN**

SIGNED SEALED AND DELIVERED

Common seal affixed as per Board  
Resolution of GWIL dated. 30.06.2007

For and on behalf of

**Gujarat Water Infrastructure Limited by:**



(R.N.Patel)

**General Manager (M)**

(Signature)

In the presence of:

Arvind Gaudana  
Consulting Company Secretary

SIGNED, SEALED AND DELIVERED

For and on behalf of

**Gujarat State Fertilizers & Chemicals Limited,**  
Sikka unit,  
For Gujarat State Fertilizers & Chemicals Ltd  
(SIKKA UNIT)

**D. R. DAVE** (Signature)

Addnl. General Manager (SU)  
(Mr. D.R. Dave)  
Additional General Manager

In the presence of:

  
(S.A. Desai)

## Annexure - C

### Tariff Rate

At present above rate of Rs. 15.00 (Rupees fifteen only) per 1000 litre is applicable.

The above rate will be applicable subject to revision of rate for price for industrial/domestic from time as may be decided by the Government of Gujarat including other terms & conditions of the agreement and the same shall be binding on parties in the agreement.

For Gujarat State Fertilizers & Chemicals Ltd.  
(SIKKA UNIT)

*[Signature]*  
**D. R. DAVE**  
Addnl. General Manager (SU)



## **ANNEXURE-VII**

### **201Rain water harvesting and artificial recharge measure for ground water in GSFC Unit, Sikka - Jamnagar**

#### **Preamble:-**

Managing Director of GSFC had requested M/s Water and Sanitation Management organization (WASMO) to propose a plan to manage water harvesting and recharging in Sikka unit of Jamnagar in the year 2008.

The committee, formed by the GSFC, visited Sikka unit on 28th- 29th August 2008, to study the feasibility of rainwater management, so that a sustainable system for the water availability for the unit could be maintained. The report is submitted in December 2008 as under.

GSFC-Sikka unit is located on Jamnagar-Dwarka highway, near village Motikhavdi. The total area of the unit is 600 acres; out of those approximately 430 acres is open area. Plant area is 120 acres and township is 50 acres.

The complex can be divided in to two parts:

1. Factory are in the east
2. Residential area in west

The average rainfall, which is uneven and erratic in nature, is 646 mm. A minor drainage system is developed in the area, which is controlled by the slopes.

The elevated ground divides both these areas. There is more than 10 meters drop in elevation from the high ground. The soil cover is thin which varies with the undulating topography.

Geologically the area is composed of Basalt formation, which is moderately weathered. Overburden in the form of soil cover has a maximum of 1.5 meters thickness, which overlays the weathered portion of the formation.

For the sustainability and security of these water supply sources in lean period, the water harvesting and conservation is necessary. Present water supply is being provided from existing well and bore-wells.

The ground water potential in western direction of plant is relatively better. The run-off coming from the Reliance area is also passing through western part. Few water-retaining structures are also created on the stream. One recharging pond no. 1 between well no 2 & 25 of 240m x 75m x 5m dimension having 90000 M3 storage capacity has already been constructed in the year of 2002. Bore blasting about 48 no. (6 x 8 No.) done in recharging pond no. 1.

As the Geological strata are porous with fractures, the water impounded in this pond is feeding the pumping well in the vicinity. Because of such recharging activity, the pond gets empty for couple of times and impounds more floods. This helps in enhancing the harvesting of more rainwater than its original capacity. The water level varies with topography and ranging

## **ANNEXURE-VII**

between 5-25 Mts. The quality of ground water is potable.

A 235 hectare area is spread sloping to East and west with the highest level at its center. No stream is passing through this area with sufficient run off to harvest a good flood during the monsoon. In this area, secondary porosity may be created to harvest the rainwater. The steep slope of the western part will allow this harnessed water to travel towards the water supply sources through the created permeability. The remaining run-off will travel through a stream further down to the western area. This stream originating at 1.5 km, has approximate catchments of 0.80 sq. km. If the flood passing through this stream is trapped, a sizable water requirement of the unit can be addressed.

### **Recommendations: -**

In the basalt formation, rainwater could be stored in fractures and joints. This water from fractures is being pumped through wells or bore wells. The yield of these water supply structures depends upon the density and lateral extension of the fractures. As the entire water supply is based on ground water, it is important to strengthen the existing system keeping future requirement in to consideration to fill-up the gap between demand and supply.

The pond, which is developed between well no 2 & 25, this proved successful in maintaining the water supply from the sources, which are mostly develop in the western part, as this sources are getting recharged from this pond. But the water supply structures, which exist in the residential areas or up- stream side of the pond, are not getting advantage of the pond due to its topographical condition. There for it is necessary to develop some more effective recharge structures to strengthen the existing system and to develop sustainability and security of the supply.

### **Existing Structures:**

1. Pond no 2 constructed near main gate of the plant. A square shape plot is available near the gate, which is being crossed by a stream. This stream collects the run-off from the plant area and passes through ADM Building towards Motikhavdi railway station. The dimension of the pond is 100X50X2 Mts. Size, so that 10 million liter of water during rainy season can be stored. This water would be utilized for the gardening and other purposes. This will save the energy and ground water exploitation.
2. **Bore Blasting Technique (BBT)**  
Bore Blasting technique-adopted to create more storage space for groundwater artificially in massive and crystalline rocks by fracturing the bedrocks. Blasting the shallow bores drilled and filled with suitable explosive slurry in the area develops selected area. 5-6 boreholes are blasted at a time. Suitable in rainfall assured areas.

## **ANNEXURE-VII**

### **Methodology of Bore Blasting:**

- After detailed Hydro-geological survey, suitable grid may be proposed for drilling of bore holes at a suitable site. Pattern may vary from site to site depending upon the geological conditions,
- Boreholes of suitable specifications are drilled at the selected site. Generally bores are of 100 to 150 mm diameter and having a depth of about 10 to 15 meters, preferably up to the depth of shallow aquifer.
- Distance between bores, decided as per site conditions, and is generally kept at 3 to 5 meters.
- Staggering pattern of boreholes is preferred.
- Suitable type of explosives and explosives charge is lowered in to the bores that are to be blasted. Controlled blasting is preferred but in case of inability to do so instantaneous blasting is carried out.

### **Effects of Explosives in Bore Blasting:**

- Fractures are created in all directions, extending radial from the shot hole.
- Extension of fractures depends up on optimum quantity of explosive charge.
- Effective radial fractures normally do not develop beyond 5 meters, which implies that distance between two boreholes is to be kept at less than 5 meters.
- Charge in excess of optimum charge (0.15 to 0.20 Kg / M3) will be of no use for further extension of radial fractures.

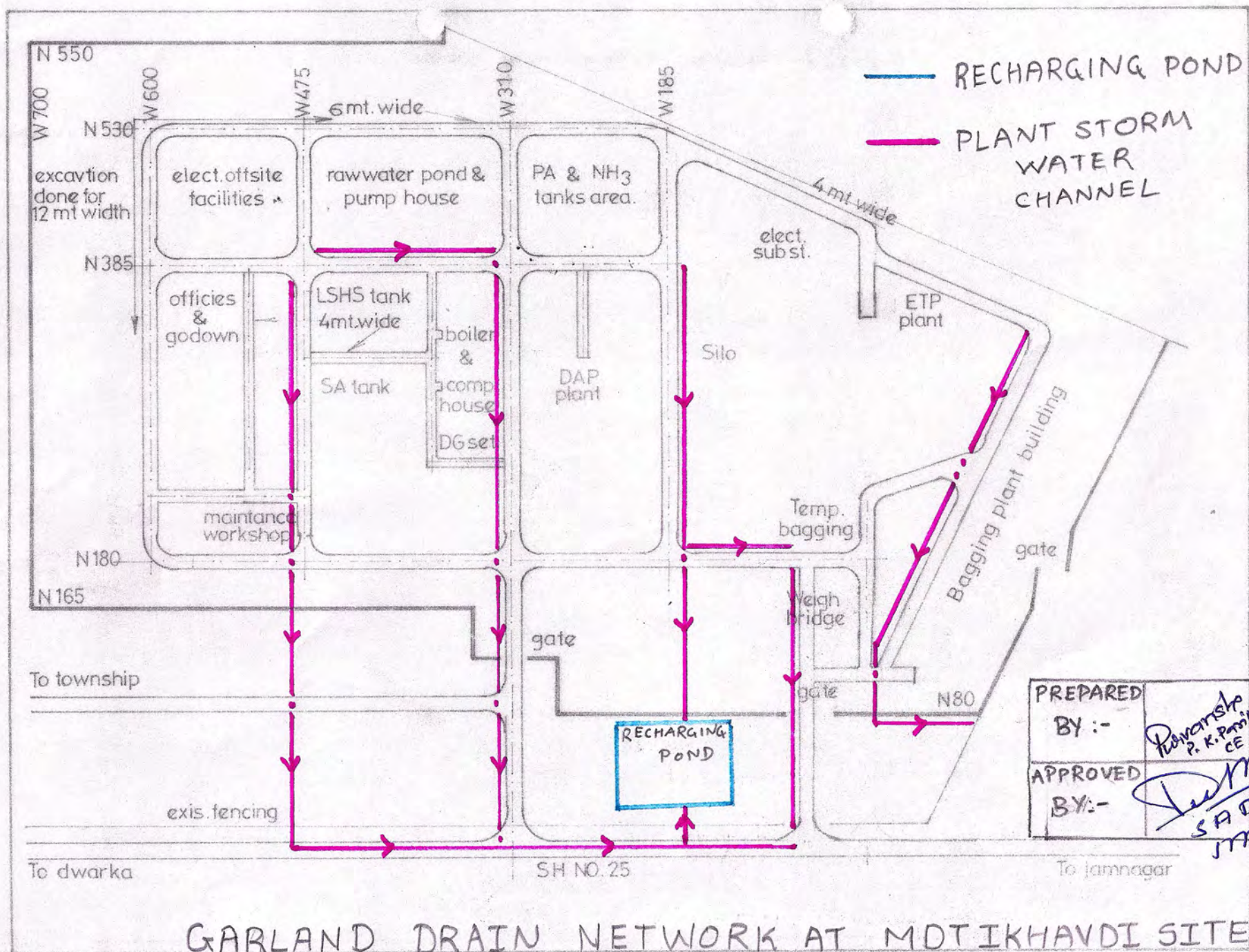
### **Present status of harvesting plan:**

1. One recharging pond no. 1 between well no 2 & 25 of 240m x 75m x 5m dimension having 90000 M3 storage capacity has already been constructed in the year of 2002. Bore blasting about 48 no. (6 x8 no.) done in recharging pond no. 1. This has increased underground water storage capacity up to 10-15 thousand M3 which is totally free from evaporation losses.
2. Pond no. 2 near main gate of the plant of 100x50x2 m having storage capacity of 10000 M3 is developed. All storm water channels of plant premises are diverted to this pond.



### Analysis of Peizometric Well Water -Within Premises of GSFC-2017

Sr. No.	DATE	LOCATION	PARAMETER					
			pH	TH	Cl	TAN	PO4	Cond
				ppm	ppm	ppm	ppm	μMHOs
1	20/11/17	Behind Fire Station	6.90	900	200	Traces	1	2380
2	20/11/17	Between Weighbridge & Logistics	7.00	1080	220	Traces	2	2750
3	20/11/17	In front of Logistics	6.80	1060	210	Traces	2	2660
4	20/11/17	In front of Bagging plant	6.80	1520	200	Traces	2	3530
5	20/11/17	Near Bagging & in opposite of STP	6.50	700	160	Traces	1	1920
6	20/11/17	Near New Bagging plant	7.60	500	120	Traces	1	1410
7	20/11/17	BEHIND SILO	7.40	150	50	Traces	1	430
8	20/11/17	Behind PA Tank C	8.00	200	70	Traces	1	630
9	20/11/17	Behing Ammonia Flair Stack	8.00	180	60	Traces	1	620
10	20/11/17	Behind Electrical Substation	6.80	4750	4400	Traces	2	13860
11	20/11/17	Near Scrap yard	7.20	380	110	Traces	1	1010
12	20/11/17	Between 3B & 3 Store room godown	7.20	430	120	Traces	1	1180
13	20/11/17	Outside Scrap yard corner beside Dustbin No.1	7.70	120	40	Traces	1	290
14	20/11/17	In opposite of Non plant substation	7.50	560	130	Traces	2	1530
15	20/11/17	Between Bentonite Silo & ADM building	6.90	900	180	Traces	2	2240



**ANNUAL EMPLOYEES MEDICAL CHECK - UP 2017-18**

Sr. No	EC No	Emp Name	Department
1	20001054	JAYANTKUMAR J DHRUNA	BAGGING PLANT
2	20001081	RAJESH H JOSHI	BAGGING PLANT
3	20001241	JAGDISH L LODAYA	BAGGING PLANT
4	20001312	DARSHAN N THAKER	BAGGING PLANT
5	20001429	ASHISHKUMAR C BHAVSAR	BAGGING PLANT
6	20001452	KISHORSINH N JADEJA	BAGGING PLANT
7	20005005	N J PAREKH	BAGGING PLANT
8	40001263	SHANTILAL JIVANBHAI CHAVDA	SU-BAGGING PLANT
9	40001386	SHANABHAI KHODABHAI VANKAR	SU-BAGGING PLANT
10	40001388	PRAVINKUMAR MANILAL PARMAR	SU-BAGGING PLANT
11	40001504	KAMLESH AMBALAL CHAVDA	SU-BAGGING PLANT
12	40001457	DAXESHKUMAR BHOGILAL BHATT	SU-BAGGING PLANT
13	20000145	RAJENDRA M DAVE	DAP A&B TRAIN
14	20000233	VIPULKUMAR B TRIVEDI	DAP C TRAIN
15	20001037	JAYSUKH P SHIHORA	DAP C TRAIN
16	20001038	PRAKASH K ANTANI	DAP C TRAIN
17	20001041	SHAILESHKUMAR K PATEL	DAP C TRAIN
18	20001044	VIREN P PANDYA	DAP A&B TRAIN
19	20001072	KIRITKUMAR B RANA	DAP C TRAIN
20	20001083	BHUPENDRA G MEHTA	DAP A&B TRAIN
21	20001088	MAHENDRASINH H BIHOLA	DAP C TRAIN
22	20001095	KIRIT G KANSAGARA	DAP A&B TRAIN
23	20001103	PRAFUL J RAVAL	DAP A&B TRAIN
24	20001114	R M Udani	DAP
25	20001167	ARVINDBHAI C PATEL	DAP C TRAIN
26	20001194	AJIT B BAROKAR	DAP A&B TRAIN
27	20001217	KANUBHAI V MAKWANA	DAP C TRAIN
28	20001218	TANMAY S GOPIANI	DAP A&B TRAIN
29	20001220	CHETANKUMAR H BHATT	DAP A&B TRAIN
30	20001221	VIJAYKUMAR J SAPARIA	DAP A&B TRAIN
31	20001222	PARESHKUMAR N DOSHI	DAP A&B TRAIN
32	20001253	JAGDISHBHAI N PATEL	DAP A&B TRAIN
33	20001255	MAHESHKUMAR R MODHA	DAP C TRAIN
34	20001262	SHAILESH B PATEL	DAP C TRAIN
35	20001288	MEHUL J SOMAIYA	DAP A&B TRAIN
36	20001430	PRAKASH K CHHATROLA	DAP A&B TRAIN
37	20001433	NARENDRA B BAVARVA	DAP A&B TRAIN
38	20001436	KIRTIKUMAR J PATEL	DAP A&B TRAIN
39	20001445	HETALKUMAR N KACHHIA	DAP A&B TRAIN
40	20001455	CHANDULAL V MORSANIYA	DAP A&B TRAIN
41	20001456	KETANKUMAR C THAKAR	DAP A&B TRAIN
42	20001459	JIGNESHKUMAR R PATEL	DAP C TRAIN
43	20001606	BHARATBHAI K MANDERA	DAP A&B TRAIN
44	20001607	BHAVESH M BARAD	DAP A&B TRAIN



45	20001608	SANDIPKUMAR L GAREJA	DAP A&B TRAIN
46	20001609	BHADRESHKUMAR D RUPARELIYA	DAP A&B TRAIN
47	20001610	HEMANGKUMAR K DAVE	DAP A&B TRAIN
48	20001611	PRADIPPURI R GAUSWAMI	DAP A&B TRAIN
49	20001612	ALPESHBHAI B CHAUHAN	DAP A&B TRAIN
50	20001613	RAM P PARSHURAM CHAUDHARY	DAP A&B TRAIN
51	20003027	HITESH H TATANI	DAP A&B TRAIN
52	20003028	MANOJ P JOSHI	DAP C TRAIN
53	20003039	BIPINKUMAR D KUBER	DAP C TRAIN
54	20001275	ASHOKKUMAR H SHIHORA	QC LAB.
55	20001278	RAJESH N RACHCHH	QC LAB.
56	20001280	MAHENDRA H PRAJAPATI	QC LAB.
57	20001299	MANISH D GODHANI	QC LAB.
58	20001440	NILESH S MAVAL	QC LAB.
59	20001441	PRASHANT B RAMANI	QC LAB.
60	20003036	RAJENDRASINH V GOHIL	QC LAB.
61	20003042	NILESH D MEHTA	QC LAB.
62	20000143	KISHORKUMAR K VYAS	UTILITY & SERVICES
63	20001049	MUKESHKUMAR V PATEL	UTILITY & SERVICES
64	20001071	SNEHAL M SHAH	UTILITY & SERVICES
65	20001073	ISHWARBHAI B GOHIL	UTILITY & SERVICES
66	20001076	RAJSINH M RATHOD	UTILITY & SERVICES
67	20001096	CHANDRAKANT K PATEL	UTILITY & SERVICES
68	20001099	VIJAYKUMAR B SONI	UTILITY & SERVICES
69	20001148	PRAKASHBHAI V RAVAL	UTILITY & SERVICES
70	20001152	PANKAJKUMAR A PANDYA	UTILITY & SERVICES
71	20001156	BHARATKUMAR K PATEL	UTILITY & SERVICES
72	20001219	JIGARALI B PANJWANI	UTILITY & SERVICES
73	20001231	SHARAD R LALCHETA	UTILITY & SERVICES
74	20001342	MANJITSING B VIRDI	UTILITY & SERVICES
75	20001372	HITESH M VAYDA	UTILITY & SERVICES
76	20001427	HAMIR B CHUDASAMA	UTILITY & SERVICES
77	20001437	NARENDRASINH P CHUDASAMA	UTILITY & SERVICES
78	20001438	HIRENKUMAR H DALWADI	UTILITY & SERVICES
79	20001453	SHAILESHKUMAR C PATEL	UTILITY & SERVICES
80	20001454	BHARATKUMAR J ANKOLA	UTILITY & SERVICES
81	20003030	CHETAN D POPAT	UTILITY & SERVICES
82	20003038	HASMUKH C VADHER	UTILITY & SERVICES
83	1332	SANJEEV S MODAK	SU-GEN ADM DEPT
84	7887	SURENDRASINH R THAKOR	SU-QC LABORATORY
85	10723	GIRIRAJASINH S JADEJA	SU-UTILITY & SERVICES
86	10774	ABHISHEK S KUMAR CHAUHAN	SU-UTILITY & SERVICES
87	11580	GUNJANKUMAR J KHATRA	SU-UTILITY & SERVICES
88	11750	SAPTARAG HOTA	SU-DAP PLANT
89	11910	HARDIK V PATEL	SU-UTILITY & SERVICES



**Consent No. AWH-91132 dated 20.02.2018. Valid up to 13.02.2023**  
**XGN User ID: 16971.**

**FORM-V**  
(See rule 14)\*

From:

Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)  
Post Bag No. 2  
Motikhavdi. 361 140  
Dist.: Jamnagar.

To,

Gujarat Pollution Control Board,  
"Paryavaran Bhavan"  
Sector: 10-A  
GANDHINAGAR. 382 010

**Environmental Statement** for the financial year ending 31st March 2018.

**PART: A**

- (i) Name and address of the owner/occupier:  
of the industry /operation or process. Shri Y P Singh,  
Sr. VP (R&D, QC, S&F, I&M Bureau,  
PU & FU)  
M/s Gujarat State Fertilizers & Chemicals  
Ltd. (Sikka Unit)  
Fertilizernagar 391 750  
Dist.: Vadodara.
- (ii) Industry Category –  
Primary – (STC Code)  
Secondary – (SIC Code) :
- (iii) Production Capacity Units : 94600 MT/ Month.
- (iv) Year of Establishment : 1986.
- (v) Date of the last environmental audit report submitted: 30.06.2017

- 
- Submission of Environment Statement is in accordance with the provisions of Rule – 14 of the Environment (Protection). Amendment Rules, 1993 of the Environment (Protection) Act, 1986 (29 of 1986) published wide notification dated 22.04.1993 GSR 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 & Forest, Government of India; read with the notification dated 13.03.1993 GSR 329 (E) of the gazette of India – Extraordinary Part – II Section – 3 Subsection (i) No. 120 dated 13.03.1993.
  - "Every person carrying on an industry, operation or process requiring consent under section 25 of Water (Prevention & Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 (14 of 1981) or both or authorization under Hazardous Waste (Management & Handling) Rules, 1989 published under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an Environmental Statement for the financial year ending the 31<sup>st</sup> March in Form V to the concerned State Pollution Control Board on or before the 30<sup>th</sup> Day of September every year, beginning 1993."

**PART: B**

**Water and Raw Material Consumption**

i. Water Consumption M<sup>3</sup>/day.

Process: 343.27

Cooling: 138.50

Domestic: 632.20

Name of Product	Process Water Consumption per unit of products output.	
	During the previous financial year.	During the current financial year.
(1) Di-Ammonium Phosphate (DAP)	0.163 M <sup>3</sup> /MT	0.172 M <sup>3</sup> /MT
(2) Ammonium Phosphate Sulphate (APS)	0.445 M <sup>3</sup> /MT	0.401 M <sup>3</sup> /MT
(3) N:P:K (12:32:16)	0.125 M <sup>3</sup> /MT	0.133 M <sup>3</sup> /MT
(4) N:P:K (10:26:26)	0.133 M <sup>3</sup> /MT	0.115 M <sup>3</sup> /MT

**Raw Material Consumption:**

*Name of Raw material	Name of product	Consumption of raw material per unit of output.	
		During the previous Financial year.	During the current Financial year.
Phos. Acid (as P <sub>2</sub> O <sub>5</sub> )	DAP	0.461 MT/MT	0.467 MT/MT
Ammonia		0.222 MT/MT	0.224 MT/MT
Sulphuric. Acid		0.041 MT/MT	0.040 MT/MT
F.O.		0.000 MT/MT	0.000 MT/MT
Bentonite		0.037 MT/MT	0.015 MT/MT
Natural Gas		6.203 SM3/MT	5.991 SM3/MT
Phos. Acid (as P <sub>2</sub> O <sub>5</sub> )	N:P:K (10:26:26)	0.261 MT/MT	0.265 MT/MT
Ammonia		0.125 MT/MT	0.126 MT/MT
Sulphuric. Acid		0.035 MT/MT	0.034 MT/MT
F.O.		0.000 MT/MT	0.000 MT/MT
Bentonite		0.000 MT/MT	0.000 MT/MT
Mureate of Potash (as K <sub>2</sub> O)		0.261 MT/MT	0.263 MT/MT
Natural Gas		8.049 SM3/MT	9.484 SM3/MT
Phos. Acid (as P <sub>2</sub> O <sub>5</sub> )	N:P:K (12:32:16)	0.322 MT/MT	0.334 MT/MT
Ammonia		0.152 MT/MT	0.155 MT/MT
Sulphuric. Acid		0.031 MT/MT	0.030 MT/MT
F.O.		0.000 MT/MT	0.000 MT/MT
Bentonite		0.065 MT/MT	0.016 MT/MT
Mureate of Potash (as K <sub>2</sub> O)		0.161 MT/MT	0.164 MT/MT
Natural Gas		8.621 SM3/MT	8.659 SM3/MT
Phos. Acid (as P <sub>2</sub> O <sub>5</sub> )	APS	0.204 MT/MT	0.219 MT/MT
Ammonia		0.247 MT/MT	0.246 MT/MT
Sulphuric. Acid		0.448 MT/MT	0.449 MT/MT
F.O.		0.000 MT/MT	0.000 MT/MT
Natural Gas		14.662 SM3/MT	16.152 SM3/MT

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



**PART: C**  
**Pollution Discharge to Environment/ unit of out put**  
 (Parameter as specified in the consent issued)

(i)	Pollutants	Quantity of Pollutants Discharged (Mass/day)	Conc. of pollutants in Discharge (Mass/vol.)	Percentage of variation from prescribed standards with reasons.
(a)	Water pH Temperature Suspended Solids Colour (Pt-Co scale) Oil & Grease Amm. Nitrogen (as N) B.O.D. (5 Days, 20 °C) C.O.D. Chloride Sulphate Total Dissolved Solids Percent Sodium	No industrial effluent is generated. Total quantity of treated sewage is recycled/reused in process.  Hence, no effluent is discharged from the factory		
(b)	Air DAP Stack Ammonia Fluorine	0.102 MT/day 0.015 MT/day	17.02 mg./NM3 2.0 mg./NM3	All parameters are well below the prescribed limits
	Boiler Stack Particulate Matter NOx	0.0011 MT/day 0.0035 MT/day	06.13 mg./NM3 18.47 mg./NM3	
	Product and raw material Handling System Stacks (units I - Nr. Old Product Handling Silo) (units II - Nr. Old Bagging plant) (units III - Nr. Admin building) (units IV - Nr. Boiler) (units V - Nr. Bagging plant A) (units VI - Nr. Bagging plant B) (units VII - Nr. Bagging plant C) (units VIII - Nr. New Product Handling Silo)			
	Suspended Particulate Matter	0.0100 MT/day	12.90 mg./NM3	

- ☐ Industrial effluent generated from process and cleaning and washings of equipment in plant is collected into equalization tanks and is recycled totally in process. Domestic sewage is treated properly and the treated sewage is utilized for the process thereby achieving zero effluent discharge in the environment.

**PART: D**  
**Hazardous Wastes**  
 (As specified under Hazardous Wastes (Management and Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (Kg.)	
	During the previous financial year.	During the current financial year.
(a) From Process	1713(Containers)	3767 (Containers)
(b) From Pollution Control facilities.	NIL	NIL

**PART: E**  
**Solid Wastes**

	Total Quantity (Kg.)	
	During the previous financial year.	During the current financial year.
(a) From Process	NIL	NIL
(b) From Pollution Control Facilities.	NIL	NIL
(c) (1) Quantity recycled or re-utilized	---NOT APPLICABLE ---	
(2) Sold	---NOT APPLICABLE ---	
(3) Disposed	---NOT APPLICABLE ---	

**PART: F**

Please specify the characterization (in terms of composition and quantity) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

The hazardous waste contains waste lube/ transformer oils, containers containing Haz. Waste Oils and Oil soaked cotton waste generated from the process and maintenance activities. All the three wastes are deposited to the /approved recycler/ TSDF registered with MoEF for reprocessing and/or incineration purpose.

**PART: G**

Impact of pollution control measures on conservation of manual resources and consequently on the cost of production.

GSFC as a corporate entity has installed 19 windmills in the Kutch district. Due to this total 27.5 MW wheeling of power is made available to Sikka Unit, which has lead to reduction in power bill.

Also during the year various lighting fixtures were replaced with energy efficient ones and a saving of approx. 1.58 Lac units was achieved.

**PART: H**

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

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**PART: I**  
**Miscellaneous**

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(Signature of the person carrying out an Industry, operation or process)



Name: D. K. Gandhi

Designation: Sr. Vice President (SU)

Address:

Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit)

Post Bag No. 2, Motikhavdi. 361 140

Dist.: Jamnagar.

Date: April 16, 2018.



# GUJARAT STATE FERTILIZERS & CHEMICALS LIMITED

An ISO Certified Company

Promoted by Govt. Of Gujarat

Sikka Unit, P. O. Moti Khavdi, Dist. : Jamnagar- 361 140, INDIA.  
Ph. : (0288) 2344100, 2344102, 2432200 to 2432300 Fax : 2344034

**By regd. Post AD**

GSFC/SU/EC/2/11

October 21, 2014

To,  
The Director (S),  
Ministry of Environment & Forests  
Regional Office, Western Region,  
"Kendra Paryavaran Bhavan",  
Lind Road No. 3, Ravi Shankar Nagar,  
**BHOPAL – 462016 (M.P.)**

Kind Attn.: Dr. A. Mehrotra – Director(S)

Sub: Advisement in newspaper for accordance of Environment Clearance

Ref: Environment Clearance letter no. F. No. J-11011/17/2013-IA II (I) dtd. 09.10.14 from MoEF & CC

Dear Sir,

This has reference to our application for seeking Environment clearance for capacity augmentations of existing DAP/NPK Plant of M/s Gujarat State Fertilizers & Chemicals Ltd. (Sikka Unit), Post Motikhavdi, Jamnagar, Gujarat.

The term of reference (ToR) was granted in 6th Re-constituted Expert Appraisal Committee (REAC) meeting of Industry Projects held on 5-7 March 2012. The REAC have recommended project in 20<sup>th</sup> committee meeting held during 23-24<sup>th</sup> June 2014 after due consideration of submission of relevant documents and presentations and Ministry has accorded the Environment Clearance to above project. Shri Lalit Bokolia, Additional Director of the committee has issued the Environment Clearance vide file no. F. No. J-11011/17/2013-IA II (I) dated 09.10.2014 (Copy attached)

As per the condition no. xvii of general condition of EC, GSFC (SU) has advertised in three local newspaper widely circulated in the region, one of which is in vernacular language informing that "the project has been accorded Environment Clearance and copy of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in> and also on the company's website at <http://www.gsfclimited.com>."

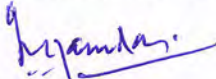
Sr. No.	Name of Newspaper	Date of advertisement	Language used
1	Times of India – Saurashtra Edition	20.10.14	English
2	Sandesh – Gujarati newspaper	20.10.14	Gujarati
3	Nobat – Gujarati Local newspaper	20.10.14	Gujarati

We herewith forward the cuttings of newspapers for your reference as per the directive.

Thanking you,

Yours faithfully,

For Gujarat State Fertilizers & Chemicals Ltd. (Sikka unit)

  
Dr. GC Kamdar

Adviser



Registered Office : Fertilizernagar, Dist. : Vadodara-391 750.

Ph. : (0265) 2242451 / 2242651 / 2242751, Fax : 2240966 Website : [www.gsfclimited.com](http://www.gsfclimited.com)





# Advertisement in Local News Papers.



**ગુજરાત સ્ટેટ ફર્ટીલાઈઝર્સ એન્ડ કેમિકલ્સ લિમિટેડ**  
(સિક્કા યુનિટ)

મોટી ખાવડી - ૩૬૧ ૧૪૦, જી. જામનગર, ગુજરાત  
ફોન : ૦૨૮૮ - ૩૦૧૯૧૦૦, <http://www.gsfclimited.com>

**જાહેર નોટીસ**

આથી જાણ કરવાની કે પર્યાવરણ, વન અને જલવાયુ પરિવર્તન મંત્રાલયે ગુજરાત સ્ટેટ ફર્ટીલાઈઝર્સ એન્ડ કેમિકલ્સ લિમિટેડ (સિક્કા યુનિટ), જી. જામનગર, ગુજરાત રાજ્યને તેના હયાત ડીએપી / એનપીકે પ્લાન્ટની ઉત્પાદન ક્ષમતામાં વધારવા માટેની પર્યાવરણીય મંજૂરી તેઓની ફાઈલ નં. FNo. 11011/17/2013-IA II (I) તા. ૦૯-૧૦-૨૦૧૪ થી આપેલ છે.

આ મંજૂરી અંગેની પ્રત ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ, ગાંધીનગર પાસે ઉપલબ્ધ છે અને પર્યાવરણ, વન અને જલવાયુ પરિવર્તન મંત્રાલયની વેબસાઈટ <http://www.Envfor.nic.in> અને ગુજરાત સ્ટેટ ફર્ટીલાઈઝર્સ એન્ડ કેમિકલ્સ લિમિટેડની વેબસાઈટ <http://www.gsfclimited.com> પર પણ જોઈ શકાશે.

સ્થળ : મોટી ખાવડી  
તારીખ : ૧૭/૧૦/૨૦૧૪

ડી.આર. દવે  
જનરલ મેનેજર (સિક્કા યુનિટ)

"SANDESH" Gujarati daily, Rajkot Edition  
dated 20.10.2014



**Gujarat State Fertilizers & Chemicals Ltd.**  
(Sikka Unit)

Motikhavdi-361 140, Dist: Jamnagar, Gujarat State  
Tele no. 0288-3019100 <http://www.gsfclimited.com>

**PUBLIC NOTICE**

It is hereby informed that Ministry of Environment, Forest & Climate change have accorded Environment clearance for Capacity augmentation of existing DAP/NPK plants at Motikhavdi of Gujarat State Fertilizers & Chemicals Ltd. (Sikka unit), Motikhavdi-361 140, Dist: Jamnagar, Gujarat state vide their File no. F No. 11011/17/2013-IA II (I) dated 09.10.2014.

Copy of clearance letters are available with Gujarat Pollution Control Board, Gandhinagar and may also be seen on the website of Ministry of Environment, Forest & Climate change at <http://www.Envfor.nic.in> and Gujarat State Fertilizers & Chemicals Ltd. at <http://www.gsfclimited.com>.

Place: Motikhavdi  
Date: 17.10.2014

DR Dave  
General Manager (SU)

"Times of India" English daily, Saurashtra split  
Edition dated 20.10.2014.



## ગુજરાત સ્ટેટ ફર્ટીલાઇઝર્સ એન્ડ કેમિકલ્સ લિમિટેડ (સિક્કા યુનિટ)

મોટી ખાવડી - ૩૬૧ ૧૪૦, જી. જામનગર, ગુજરાત  
ફોન : ૦૨૮૮ - ૩૦૧૯૧૦૦, <http://www.gsfclimited.com>

### જાહેર નોટીસ

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સ્થળ : મોટી ખાવડી ડી.આર. દવે  
તારીખ : ૧૭/૧૦/૨૦૧૪ જનરલ મેનેજર (સિક્કા યુનિટ)

"GUJARATI NEWS PAPER, "NOBAT" ON 20.10.2014"

Note:

EC/ARSENIC SLUDGE/04/2018

26 April, 2018

Sub: Report on storage of Arsenic sludge at SU

1155 Mts.(Gross Weight) of Arsenic sludge in the form of Blocks and Drums sent from HO at SU has been stored in a Bunker constructed as per the design approved by GPCB in 1994-95.

The Bocks and the Drums have been stored and the Bunker has been totally sealed permanently. A provision of collection of leachate has been made and the Inspection chambers with sumps have been made for the Inspection /sampling purpose. However, on Inspection it is observed that, no leachate was observed. The Bunker is found in good physical condition.

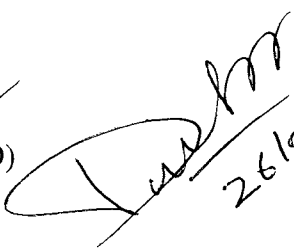
Both the chambers have been locked and the keys are available with the undersigned as well as with the Town office.

As directed by GPCB officials, a write up has been painted on the wall of the Bunker as identification in Gujarati as well as in English.



S A Rawal  
Env. Engr. (EC)

S A Desai  
Chief (SAD)



26/04/2018