1.0 BRIEF SUMMARY

1.1 Background

Fertilizer Corporation of India Limited (FCIL) has the credit to be the first Public Sector Undertaking of Government of India operating since 1951. Sindri unit of FCIL was commissioned in 31st October, 1951 in the name of Sindri Fertilizer Factory for production of ammonia and urea. Fertilizer Corporation of India Limited (FCIL), incorporated in January 1961, operated four fertilizer units namely Sindri (Jharkhand), Ramagundam (Andhra Pradesh), Talcher (Orissa) and Gorakhpur (Uttar Pradesh).

Sindri Modernisation Plant, 900 MTPD single stream ammonia and 1000 MTPD urea plants were commissioned on 1st October 1979. In addition to the main plants, fertilizer complex at Sindri has self-contained utility and off-site facilities including township. The complex also has plants to produce products like Ammonium bi-carbonate, Ammonium Nitrate, Nitric acid and a power generation plant of 80 MW.

The existing unit of closed Ammonia-Urea fertilizer complex at Sindri of Fertilizer Corporation of India Limited (FCIL), at that time, was one of the new generation fertilizer plants based on LSHS / Fuel-oil as a feed stock.

Due to under performance of all the plants, FCIL had made huge losses. These losses had their own cascading effect. The company was declared sick and was referred to BIFR in 1992. The Sindri unit was declared shut down in January 1999. The Government of India had decided to close down the company in December 2002. Subsequently all the units of FCIL including Sindri were closed down and all the employees, barring a few (5 to 10 in each unit), were released under VSS on 31-12-2002.

Due to closure of all fertilizer units namely Gorakhpur, Barauni, Sindri, Durgapur, Haldia, Talcher and Ramagundam, a great gap between demand and supply of India was experienced both by consumers and Government. In 2007, Govt. decided to have a second look at the decision to close the fertilizer units due to huge infrastructure facilities available at the plant locations and increasing gap between domestic production and demand of urea. Various options of revival of units have been considered at different point of time.

Recently a decision regarding revival of closed units of Sindri, Gorakhpur and Barauni of FCIL and HFCL by PSUs though nomination route was taken by PMO.

The project proponent proposes to set up a new Ammonia-Urea Fertilizer Manufacturing Complex at the existing site at FCIL Sindri. The Proposed Project falls

under the Category-"A" of project listed in Schedule 5 (a) as per EIA Notification, 2006 of MOEF.

The proposed project shall be established within the existing premises of FCIL Sindri unit in the free unencumbered available land.

The existing Sindri unit of FCIL is located in the District of Dhanbad in the State of Jharkhand. Sindri is well connected with major cities by rail / road. Dhanbad district headquarter is about 26 km from Sindri is an important divisional headquarter of East Central Railway. The historical Grand Trunk Road and National Highways NH-02 connecting Kolkata and Delhi passes only about 25 km from Sindri Factory area. Other major highways NH-32 is also passing nearby. Nearest Airport having regular commercial flights are at Ranchi 180 km, Kolkata 256 km and Patna 296 km away from Sindri. Kolkata 256 km on Bay of Bengal is the most important seaport of the eastern India where all major sea liners of world have anchors. Location map has been presented in Annexure-1 & 2.

1.2 Project at a Glance

S.No.	Parameter	:	Description
1.0	Name of the Project	:	Ammonia-Urea Fertilizer Project
2.0	Name of the Project Proponent	:	Fertilizer Corporation of India Limited
3.0	Project Location		Sindri (Jharkhand)
4.0	End Product	:	Urea
5.0	Plant Capacity (MTPD)		
	- Ammonia	:	2,200
	- Urea (Neem coated prilled)	:	3,850
6.0	Plant Stream Days	:	330
7.0	Annual Production (MT)	:	12,70,500
8.0	Man Power Requirement (Nos.)	:	460
9.0	Project Time Schedule (Months)	:	36
10.0	Mode of Implementation	:	EPCM
11.0	Annual requirement of Raw Material & Utilities		
	- Natural Gas (1000 Sm^3)	:	7,20,007
	- Water (100 m^3)	:	1,00,188
12.0	Delivered Price of Raw Material		

S.No.	Parameter	:	Description
	- Natural Gas (Rs. per 1000 Sm^3)	:	17,254 (7.50 US$/MMBtu)
13.0	Project Capital Cost (Rs. Crore)		
	- Total	:	5,456
	- FC (Foreign Currency)	:	1,358
14.0	Debt: Equity Ratio	:	2:1
15.0	Cost of Production of Neem Coated Urea at Rated Capacity (Rs./MT)	:	17,729
16.0	Realisation Price of Neem Coated Urea (Rs/MT)	:	22,043
17.0	Financial Indices	:	
	Return at rated capacity	:	
	- On Total Capital (%)	:	17.65
	- On Equity Capital (%)		33.29
18.0	Break Even Points (%)	:	
	- Profit	:	57.78
	- Cash		69.24
19.0	Pay Back Period (years)	:	5.75
20.0	I.R.R. (Post Tax) %		14.80

1.3 Environment Consideration

Though Dhanbad industrial area falls in the list of 88 industrial clustures identified for preparation of Comprehensive Environmental Pollution Index (CEPI). FCIL Sindri which is located at a distance 28 kms, does not fall in the list of 88 industrial clustures identified for preparation of Comprehensive Environmental Pollution Index (CEPI). It is also worth mentioning that the moratorium has been lifted in 2013.

The rate of growth of nearby towns, is similar to the rate of growth of other towns. All the required civic amenities like School, College, medical facilities etc are available within 15 km radius of FCIL.

1.4 Need & Justification

The need and justification of the proposed project is summarized as under:

- It will reduce overall gap between demand and supply in the country especially in Eastern region.
- It will maintain stability in indigenous / domestic market for Urea.
- It will check the import of urea to some extent and yield national savings.
- It will generate employment opportunity for the people in the region.
- It will ease the availability of urea to farmers.

1.5 Conclusion

The proposal of revival of ammonia/urea plant at FCI-Sindri in Dhanbad district of Jharkhand state can be seen as a corrective step towards reducing the growing supply gaps for fertilizer urea in eastern zone and to minimize import dependence to fill the supply-gap. Indirectly, by producing the fertilizer within the consumption region, it will lessen the pressure on the long distance transport network as well as the transport cost involved in such long distance movement between production units and the consuming points.

The proposed plants at FCIL Sindri shall be implemented based on state of the art technologies. Energy consumption for ammonia and urea approximately 7.005 Gcal/Te of ammonia and 4.904 Gcal/Te of Urea.