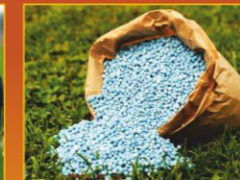




# REVIVAL OF TALCHER FERTILIZER PLANT AT ODISHA

A major step in taking the Country towards self sufficiency in Fertilizer



## Our Offices



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A Joint Venture of



Gail India Ltd. (GAIL)



Rashtriya Chemicals Fertilizers Ltd. (RCF)



Coal India Ltd. (CIL)



Fertilizer Corporation India Ltd. (FCIL)



**Talcher Fertilizers Limited**



With an aim to realise the vision of Hon'ble Prime Minister, Shri Narendra Modi to develop East India to ensure the prosperity of the nation, the Government of India has initiated the revival of the coal based fertilizer plant at Talcher.

To revive the Talcher fertilizer plant, a Joint Venture Company The "Talcher Fertilizers Limited" (TFL) has been incorporated with GAIL (India) Limited, Coal India Limited, Rashtriya Chemicals & Fertilizers Limited each contributing equity of 29.67% while Fertilizer Corporate of India Limited retaining 10.99% equity. The plant is based in Angul district which is located about 126 km away from Odisha's capital Bhubaneswar. It will have the capacity to produce 3,850 tonnes per day (TPD) of urea.

While India is the fastest growing major economy of the world, the backbone of India's economy continues to be the agriculture sector which employs about half of the country's workforce. And for agriculture to flourish, urea is an important ingredient as it is the pre-dominant fertilizer used. In view of high deficit in the supply of urea fertilizer in the country and reduce import dependence, the Government of India decided to utilise the huge reserve of coal in the country for manufacture of urea using the suitable coal gasification technology.



### Project Details

The project will have an output of 1.28 MMTPA of 'Neem' coated prilled urea using Coal as feedstock. A Coal Gasification based Ammonia Urea Complex with a design capacity of 2200 TPD of Ammonia and 3850 TPD of Urea along with associated facilities at an estimated investment of approximately Rs. 8000 crore will be set up. The project will be financed through equity from shareholders and debt from financial institutions in Debt Equity ratio of 70:30.



### Socio-economic benefits for the people of Odisha

The project will result in tangible beneficial impacts on the quality of life and socio-economic status of the people in the area. It is expected to trigger a great economic boom in eastern part of the country as it will generate opportunities in the form of direct and indirect employment in the region.

### Direct and Indirect Employment Opportunities

|  |             |
|--|-------------|
| During Construction period of four years       | 10,000 max. |
| Direct in Plant                                | 550         |
| Indirect in Plant                              | 2500        |
| Direct in Coal Mine                            | 60          |
| Indirect in Coal Mine                          | 400         |
| In the surrounding area for miscellaneous jobs | 1000        |

- Increase in urea availability for the nearby farmers, thus increasing their crop yield
- The by-products of the gasification unit like sulphur and slag will be used in many industries and in construction units. Growth of such industries will also promote employments to the local people.
- Investments in social projects in the neighbouring community would increase the benefits to the local population



The project will contribute towards human resource development, direct & indirect employment to local people, increase in employment opportunities and reduction in migrants to outside for employment and increase in consumer prices of indigenous produce and services, land prices, house rent rates and labour prices.



### Environmental benefits

The gasification process which is adopted at Talcher unit is a Clean Coal Technology giving negligible CO<sub>2</sub>, SOX, NOX and free particle emissions as compared to directly coal fired processes.

- i. Carbon Dioxide (CO<sub>2</sub>), commonly called greenhouse gas, which is emitted from coal would be captured in closed loop process and recycled for production of Urea

- ii. Sulphur from Coal (up to 0.8%) and Pet Coke (up to 8%) would be separated as a saleable by-product.
- iii. Ash is formed in gasification from these inorganic impurities such as Mercury, Arsenic and Particulate Matter (PM) in coal and would be largely converted to vitreous slag, which is essentially non - hazardous, inert and only half the volume of fly ash. This is a saleable commodity and is used in road surface, cement additives and sandblasting grit.
- iv. Coal usually contains 0.5% to 3% Nitric Oxide and Nitrogen Dioxide, most of which converts to harmless Nitrogen gas.
- v. Coal transportation from mine to plant (approx. distance 10 km) via enclosed conveyor would ensure negligible free particle pollution enroute to the plant.



### Coal Sourcing

The feedstock for the fertilizer plant will be derived from the coal block "North of Arkhupal" in Talcher, Odhisa. The area is partially explored and thus the coal resources are in indicated category. The indicated coal resource of the northern part of "North Arkhupal" is of 920 MMT and the area of the block is 11.62 km<sup>2</sup>. The coal is of non-coking type with varying grades.. Detailed exploration of the coal block is being taken up to in conjunction with Central Mine Planning and Design Institute (CMPDI) to ascertain the recoverable reserve. It is envisaged that the coal block will come into production in six years. However, till the commencement of production from the coal block, the feed will be derived from Bhubaneswari Coal Mine of CIL in Talcher for a period of 4 years under agreement of bridge linkage.

