

EXECUTIVE SUMMARY

Key Facts

Date of Incorporation of the Company	7 January 1981
Corporate Office	Bhubaneswar, Odisha

Details of Major Units of the Company

Plant	Location	Average Production/ Installed Capacity during last five years ending 2016-17	Average Production during last five years ending 2016-17
Mines (In lakh tonnes)	Damanjodi, Odisha	67.20	61.23
Refinery (In lakh tonnes)	Damanjodi, Odisha	22.40	19.26
Smelter Plant (In lakh tonnes)	Angul, Odisha	4.60	3.62
Captive Power Plant (In Million Units)	Angul, Odisha	10,512.00	6,356.70

Key Findings

Alumina Refinery

The actual production of Alumina Hydrate during the period from 2012-13 to 2016-17 was 96.31 lakh tonnes against the target of 107.35 lakh tonnes, resulting in shortfall of 11.04 lakh tonnes. The shortfall in production of Alumina Hydrate in the Refinery was primarily due to under-performance of mining and allied activities.

(Para No. 2.1)

The Company was unable to maintain the required stock level of Bauxite at Refinery end due to lower production in the Mines. This constrained the Company in blending the Bauxite for feeding the same with even silica content to the Refinery, leading to excess consumption of 1.46 lakh tonnes of Caustic Soda in the Refinery during the period 2012-13 to 2015-16, for which the Company had to incur additional expenditure of ₹426.27 crore.

(Para No. 2.1.4)

Despite realising the requirement for installation of High Rate Decanter and Deep Cone Washer for handling increased mud load in the Refinery since May 2011, which could have accrued an approximate annual savings of ₹75.45 crore, the Company awarded the work order for processability study in February 2016, i.e. after 57 months.

(Para No. 2.2)

Smelter Plant

The capacity utilisation of Smelter Plant remained lower than the installed capacity primarily due to non-availability of adequate power from the Captive Power Plant. The Company was not able to develop the Coal Blocks allotted by Government of India for supply of coal to the Captive Power Plant for generation of required power for Smelter Plant. There was shortfall in production of 4.93 lakh tonnes of Aluminium in the Smelter Plant during the period 2012-13 to 2016-17, for which the Company lost the opportunity of earning incremental contribution amounting to ₹1,086.63 crore, due to selling of intermediate product (Calcined Alumina) instead of selling the value added product (Aluminium metal).

(Para No. 3.1)

The Company incurred additional expenditure of ₹326.62 crore towards excess consumption of coal in the Captive Power Plant during the period from 2012-13 to 2016-17 due to high dry flue gas and un-burnt carbon loss in ash, resulting in higher Station Heat Rate as compared to the norms.

(Para No. 3.4)

As the Company did not avail the facility of joint sampling of coal at the loading point, the Company could not detect slippage of quality of coal, resulting in avoidable expenditure of ₹239.23 crore towards coal procured during the period 2012-13 to 2016-17.

(Para No. 3.5)

Environmental Issues

The transportation of excavated Bauxite in South Block Mines by dumpers to the crushers in Central and North Block Mines, instead of transporting the same through the conveyor belt, was not in conformity with the conditions of Environmental Clearance granted for operation of South Block Mines.

(Para No. 4.1)

The discharge of Red Mud which ranged from 6,723 tonnes per day to 8,741 tonnes per day, as well as discharge of Red Mud Pond Effluent which ranged from 5,425 kilo litres (KL) per day to 6,854 KL per day, during the period 2012-13 to 2016-17, was consistently higher than the corresponding limits of 6,087 tonnes per day and 5,200 KL per day as specified by the Odisha State Pollution Control Board.

(Para No. 4.2)

Recommendations:

1. The Management may constantly monitor the position and deployment of skilled Heavy Earth Moving Machine operators so that, in future, production from Mines is not affected.
2. Balance pre-production drilling activity may be completed expeditiously so that quality and quantity of Bauxite are properly assessed before preparing annual and monthly mine production plan.
3. Removal of the top soil and the laterite overburden may be carried out as per the Indian Bureau of Mines (IBM) approved mining plan. Clearance of the backlog would help to get more options for quality control and blending of Bauxite.
4. The Management may maintain adequate level of Bauxite in stockpile to reduce the variation in Bauxite quality before feeding to the Refinery.
5. The allotted Coal Blocks may be developed at the earliest to ensure supply of coal to the Captive Power Plant.

