

BRIEF SUMMARY

1. M/s. Hindustan Zinc Limited proposes to set up Zinc Smelting Plant with proposed capacity of 1x0.35 MPTA of Zinc Smelter along with Fumer Plant, 2X90 MW of captive power plant and 35 MW WHRB at Gujarat Industrial Development Corporation (GIDC) Doswada, Taluka Songadh, District Tapi, Gujarat. It is proposed to adopt hydro-metallurgical smelting process, which is a Roast, Leach and Electro-winning process technology.
2. The proposed unit will be located at GIDC Doswada, Taluka Songadh, District Tapi, Gujarat.
3. The land area acquired for the proposed plant is 165.60 ha and which falls under GIDC industrial area. No Rehabilitation & Resettlement (R&R) issues involved.
4. The total power requirement for the Smelter Complex is 215 MW, which will be sourced from 2x90 MW coal based Captive Power Plant/GUVNL (GUJARAT Urja Vikas Nigam Limited) and 35 MW Waste Heat Recovery Plant. Further, DG Sets of 20 MW are proposed for emergency backup power.
5. The fresh water requirement for the proposed Zinc Smelter Complex is estimated as 35,000 m³/Day and will be supplied by Gujarat Water Supply and Sewerage Board from Ukai dam through a pipeline. Zero effluent discharge will be maintained, and treated effluent shall also be utilized in the process.
6. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. within 10 km radius of study area. Further, there is no forest land in the proposed project site. Purna wildlife Sanctuary ESZ is located at distance of 10.7 km, S.
7. Total project cost is about Rs. 5000 Crores. The expected employment generation from proposed project will be about 3100 persons and 1900 persons during construction and operation phase respectively.
8. The targeted production capacity of the proposed smelter project will be 0.35 MTPA of Zinc ingots, 2x90 MW (180 MW) of CPP and 35 MW of WHRB. The basic raw material, source and transportation details are as given below:

Item	Total Quantity/ Year (Tonnes)	Source of Supply		Probable Transportation	
		Imported %	Indigenous %	Imported	India
Zinc Concentrate	700,000	100%	-	ship	Rail/Road
Zinc Secondaries (Dross/ Ash/ Other Zinc bearing wastes)	50,000	-	100%	-	Road
Aluminium Metal	1000	-	100 %	-	Road
Coal for Power Plant	15,00,000	70 %	30%	ship	Rail/Road
Coal for Fumer Plant	1,96,000	70 %	30%	ship	Rail/Road

9. The end products and by-products details are given below:

PRODUCTS	UOM	QUANTITY
SHG Zinc Cathode/Ingot (Special High Grade)	TPA	3,50,000
Zinc (Continuous Galvanizing Grade)/ Zinc Alloys/ Zinc Compounds (out of 3,50,000 TPA)	TPA	1,00,000

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PRODUCTS	UOM	QUANTITY
Power (Thermal)	MW	2X90
DG Sets (Emergency)	MW	20
BY-PRODUCTS (TPA)		
Sulphuric Acid	TPA	6,64,000
Zinc Oxide Compound	TPA	80,500
Copper as Copper Sulphate/ Chloride/ Matte/ Compound (equivalent metal)	TPA	1,000
Granulated Slag	TPA	2,10,000
Cadmium Metal / Sponge (equivalent metal)	TPA	1200
Bottom Ash/Fly Ash	TPA	4,25,000
Cobalt as Cobalt oxide/compound (equivalent metal)	TPA	50
Nickel	TPA	30
Germanium	TPA	25
Lead - Silver Compound	TPA	18,900
Calomel	TPA	44
Waste Heat Power	MW	35
Sodium Sulphate	TPA	3,000
Sodium Chloride	TPA	750

10. The solid waste generation from ETP, purification cake, cooler cake, anode mud, cobalt cake, used oils, waste oils etc. will be stored in designated area for further disposal for alternative uses/landfill site. The fly ash generated from the power plant will be provided for cement manufacturing. Bottom ash will be provided to bricks manufacturers. Surplus quantity of bottom ash, if any, shall be disposed in the ash pond.
11. No court case or violation under EIA Notification.