

**FORM – I**  
**PRE FEASIBILITY REPORT**  
**&**  
**TERMS OF REFERENCE**

*of*

**GARIVIDI MANGANESE ORE MINE**  
Garividi Village, Garividi Mandal, Vizianagaram District  
Andhra Pradesh.

**MINING LEASE AREA: 21.587 Ha**  
**(NON FOREST AREA)**

*For*

**50,000 TONNES/YEAR OF**  
**MANGANESE ORE PRODUCTION**

*of*

**M/S. RBSSD & FN DAS**

Prepared By



**B.S. ENVI-TECH (P) LTD.,**  
Secunderabad – 500 017  
NABET Accreditation No: NABET/EIA/1316/RA002

**FORM - I**



## FORM 1

(As Per New Notification of MoEF dated 1-12-2009 vide SO 3067 (E))

<b>BASIC INFORMATION</b>		
<b>S. No</b>	<b>Item</b>	<b>Details</b>
1	Name of the Project/s	<b>Garividi Manganese Ore Mine</b> of M/s. R.B.S.S.D & F.N. DAS
2	S. No. in the schedule	1 (a)
3	Proposed capacity/ area/ length/ tonnage to be handled/ command area/ lease area/ number of wells to be drilled	Proposed Capacity: 50,000 TPA of Manganese Ore. Mine Area: 21.587 ha.
4	New/ expansion/ modernization	Operating Mine
5	Existing capacity/ Area etc.	Nil
6	Category of Project i.e 'A' or 'B'	<b>"B"</b>
7	Does it attract the general condition? If yes please specify.	No
8	Does it attract the specific condition? If yes please specify.	No
9	Location	
	Plot/ Survey/ Khasra No	Sy. No. 20(P)
	Village	Garividi
	Tehsil/Mandal	Garividi
	District	Vizianagaram
	State	Andhra Pradesh
10	Nearest railway station/ airport along with distance in kms.	Garividi RS – 1.2 km - S Visakhapatnam AirPort – 69.7 km - SW
11	Nearest town, city, district headquarters along with distance in kms.	Garividi (Mandal headquarters) – 2.6 km. Vizianagaram (District headquarters) – 19.8 km.
12	Village panchayaths, Zilla parishad, Municipal Corporation, Local body (Complete postal addresses with telephone nos to be given)	Garividi Village
13	Name of the applicant	Mr. Manvendra Mor Owner
14	Registered address	<b>M/S RBSSD &amp; FN DAS</b> Shreeramnagar (P.O) - 535101 Vizianagaram District Andhra Pradesh Tel. No. 08952-282041
15	Address for correspondence	
	Name	Mr. Manvendra Mor
	Designation (Owner /Partner/ CEO)	Owner

	Address	<b>M/S RBSSD &amp; FN DAS</b> Shreeramnagar (P.O) - 535101 Vizianagaram District Andhra Pradesh
	Pin code	535101
	E- mail	<a href="mailto:psk_kishore@yahoo.co.in">psk_kishore@yahoo.co.in</a>
	Telephone no.	08952-282041
	Fax no.	-
16	Details of Alternative sites examined, if any location of these sites should be shown on a topo sheet.	Not Applicable
17	Interlinked projects	Not Applicable
18	Whether separate application of interlinked project has been submitted?	Not Applicable
19	If yes, date of submission	Not Applicable
20	If no, reason	Not Applicable
21	Whether the proposal involves approval/ clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation)Act, 1980 (b) The Wild Life (Protection)Act, 1972 (c) The CRZ Notification, 1991	None
22	Whether there is any Government Order/ Policy relevant/ relating to the site?	None
23	Forest land involved (hectares)	Not Applicable
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? (a) Name of the court (b) Case No (c) Orders/ directions of the court, if any and its relevance with the proposed project.	None

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<b>(I) Activity</b>			
<b>Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)</b>			
<b>S.No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	<b>Yes</b>	The mine is already in operation since 1994. Presently an area of 3.32 ha is the area of excavation.  Out of the total area of 21.587 Ha. About 4.218 ha land will be mined during the life of the mine. At the conceptual period the greenbelt will be developed in an area of 10.426 ha and for the present plan period greenbelt is developed in 0.375 Ha. Land use pattern for the balance area remains undisturbed.
1.2	Clearance of existing land, vegetation and buildings?	<b>No</b>	None
1.3	Creation of new land uses?	<b>Yes</b>	The mined out area will be converted into water reservoir.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	<b>No</b>	Not required
1.5	Construction works?	<b>No</b>	None
1.6	Demolition works?	<b>No</b>	None
1.7	Temporary sites used for construction works or housing of construction workers?	<b>No</b>	None
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	<b>No</b>	Not Required
1.9	Underground works including mining or tunneling?	<b>No</b>	Not Applicable
1.10	Reclamation works?	<b>Yes</b>	Minedout area will be converted to water reservoir
1.11	Dredging?	<b>No</b>	None
1.12	Offshore structures?	<b>No</b>	None
1.13	Production and manufacturing processes?	<b>Yes</b>	The mine is operated by opencast method of mining with

			manual means.
1.14	Facilities for storage of goods or materials?	<b>Yes</b>	Storage Dumps are created.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	<b>Yes</b>	The solid waste generated is stored in dumps within the mine lease area.
1.16	Facilities for long term housing of operational workers?	<b>No</b>	No housing is proposed
1.17	New road, rail or sea traffic during construction or operation?	<b>No</b>	Not Required
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	<b>No</b>	Not Required
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	<b>No</b>	Not applicable
1.20	New or diverted transmission lines or pipelines?	<b>No</b>	Not applicable
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	<b>No</b>	Not applicable
1.22	Stream crossings?	<b>No</b>	None
1.23	Abstraction or transfers of water from ground or surface waters?	<b>No</b>	Usage of 5m <sup>3</sup> /day of fresh water from borewell.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	<b>No</b>	Not applicable
1.25	Transport of personnel or materials for construction, operation or decommissioning?	<b>No</b>	Not applicable
1.26	Long-term dismantling or decommissioning or restoration works?	<b>No</b>	Not applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	<b>No</b>	Not applicable
1.28	Influx of people to an area in either temporarily or permanently?	<b>No</b>	Not applicable
1.29	Introduction of alien species?	<b>No</b>	Not applicable
1.30	Loss of native species or genetic diversity?	<b>No</b>	Not applicable

1.31	Any other actions?	<b>No</b>	Not applicable
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**2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):**

<b>S.No.</b>	<b>Information/checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
2.1	Land especially undeveloped or agricultural land (ha)	<b>No</b>	Out of 21.587 Ha, about 4.218 Ha will be utilized for mining.
2.2	Water (expected source & competing users) unit: KLD	<b>Yes</b>	5 m <sup>3</sup> /day Source : Borewell
2.3	Minerals (MT)	<b>Yes</b>	Manganese - 184 Tons per day
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	<b>No</b>	Not Required
2.5	Forests and timber (source – MT)	<b>No</b>	Not applicable
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	<b>Yes</b>	No fuel is required. Grid power is availed.
2.7	Any other natural resources (use appropriate standard units)	<b>No</b>	Not applicable

**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

<b>S.No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	<b>No</b>	Hazardous substances are not used.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	<b>No</b>	No impact on water bodies, hence not applicable
3.3	Affect the welfare of people e.g. by changing living conditions?	<b>No</b>	Not applicable
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	<b>No</b>	Not applicable

3.5	Any other causes	<b>No</b>	Nil
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<b>4. Production of solid wastes during construction or operation or decommissioning (MT/month)</b>			
<b>S.No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with source of information data</b>
4.1	Spoil, overburden or mine wastes	<b>Yes</b>	About 37,350 TPA. of waste will be generated and most of the quantities will be utilized for road making approach roads etc., and the remaining waste will be stacked at dumping yard with stone pitching.
4.2	Municipal waste (domestic and or commercial wastes)	<b>No</b>	No generation of municipal waste
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	<b>No</b>	None
4.4	Other industrial process wastes	<b>No</b>	None
4.5	Surplus product	<b>No</b>	Nil
4.6	Sewage sludge or other sludge from effluent treatment	<b>No</b>	Nil
4.7	Construction or demolition wastes	<b>No</b>	Not required
4.8	Redundant machinery or equipment	<b>No</b>	Nil
4.9	Contaminated soils or other materials	<b>No</b>	Nil
4.10	Agricultural wastes	<b>No</b>	Nil
4.11	Other solid wastes	<b>No</b>	Nil

<b>5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)</b>			
<b>S.No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with source of information data</b>
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	<b>Yes</b>	Emissions from transportation only.

5.2	Emissions from production processes	<b>No</b>	Nil
5.3	Emissions from materials handling including storage or transport	<b>Yes</b>	Emissions are only from tippers of 10 tonnes capacity for transportation. No. of tippers moving are 5 per day.
5.4	Emissions from construction activities including plant and equipment	<b>No</b>	Not applicable
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	<b>No</b>	Not applicable
5.6	Emissions from incineration of waste	<b>No</b>	Not applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	<b>No</b>	Not applicable
5.8	Emissions from any other sources	<b>No</b>	Nil

**6. Generation of Noise and Vibration, and Emissions of Light and Heat:**

<b>S. No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data</b>
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	<b>Yes</b>	From moving vehicles, as it is totally manual mining.
6.2	From industrial or similar processes	<b>No</b>	Nil
6.3	From construction or demolition	<b>No</b>	No construction or demolition.
6.4	From blasting or piling	<b>No</b>	No drilling or blasting is involved.
6.5	From construction or operational traffic	<b>Yes</b>	Dust generation from movement of vehicles only.
6.6	From lighting or cooling systems	<b>No</b>	Nil
6.7	From any other sources	<b>No</b>	Nil

**7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:**

<b>S. No.</b>	<b>Information/Checklist</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with</b>
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	<b>confirmation</b>		<b>source of information data</b>
7.1	From handling, storage, use or spillage of hazardous materials	<b>No</b>	Not applicable
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	<b>No</b>	Not Applicable
7.3	By deposition of pollutants emitted to air into the land or into water	<b>No</b>	Not applicable
7.4	From any other sources	<b>No</b>	Nil
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	<b>No</b>	Nil

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment**

<b>S. No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with source of information data</b>
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	<b>No</b>	Nil
8.2	From any other causes	<b>No</b>	Nil
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	<b>No</b>	Nil

**9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality**

<b>S. No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
9.1	Lead to development of supporting facilities, ancillary development or	<b>Yes</b>	It is anticipated that the project would bring following

	<p>development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> <li>• Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)</li> <li>• housing development</li> <li>• extractive industries</li> <li>• supply industries</li> <li>• other</li> </ul>		<p>benefits to the people of the surrounding villages:</p> <ul style="list-style-type: none"> <li>▪ Generation of employment and improved standard of living.</li> <li>▪ Increased revenue to the state by way of Royalty, taxes and duties.</li> <li>▪ Improved green cover.</li> <li>▪ Superior communication and transport facilities etc.</li> </ul>
9.2	Lead to after-use of the site, which could have an impact on the environment	<b>No</b>	Nil
9.3	Set a precedent for later developments	<b>No</b>	Nil
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	<b>No</b>	Nil

### (III) Environmental Sensitivity


S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) from Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	Not applicable
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Champavati River Gadi Gadda Kandalvalasa River	11 km 3.2 km 6.8 km
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	Not applicable
4	Inland, coastal, marine or	No	Not applicable

	underground waters		
5	State, National boundaries	Andhra Pradesh – Odisha	49.5 km - WNW
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	Not applicable
7	Defence installations	No	Not applicable
8	Densely populated or built-up area	Vizianagaram	24.5 km
9	Areas occupied by sensitive man-made land uses ( <i>hospitals, schools, places of worship, community facilities</i> )	No	Not applicable
10	Areas containing important, high quality or scarce resources ( <i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i> )	No	Not applicable
11	Areas already subjected to pollution or environmental damage. ( <i>those where existing legal environmental standards are exceeded</i> )	No	Not applicable
12	Areas susceptible to natural hazard which could cause the project to present environmental problems ( <i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i> )	None	This site falls under seismic zone-2, hence less prone to earthquakes.

“I hereby give under taking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost.

Date: 27-09-2012

Place: Shreeramnagar

<b>Signature of the Applicant</b> (Project proponent/ Authorized signatory)	
<b>Name</b>	<b>Manvendra Mor</b>
<b>Designation</b>	<b>Owner</b> <b>M/s RBSSD &amp; FN Das</b>
<b>Addresss</b>	Shreeramnagar (P.O) – 535101, Vizianagaram District, Andhra Pradesh.